SEMINOLE COUNTY GOVERNMENT AGENDA MEMORANDUM

SUBJECT: Water Supply Facilities Work Plan - 2007

DEPARTMENT: Planning and Development **DIVISION:** Planning

AUTHORIZED BY: Dori DeBord CONTACT: Dick Boyer EXT: 7382

MOTION/RECOMMENDATION:

- 1. Approve the request and authorize the Chairman to execute an ordinance adopting the proposed text amendments to the Capital Improvements, Conservation, Future Land Use, Implementation, Intergovernmental Coordination, and Potable Water Elements of the Seminole County Comprehensive Plan to implement the Water Supply Facilities Work Plan; or
- 2. Deny the request; or
- 3. Continue the item to a time and date certain.

County-wide Dick Boyer

BACKGROUND:

In 2002, 2004 and 2005, the Florida Legislature expanded requirements for local government Comprehensive Plans to strengthen coordination of regional water supply planning with local land use planning, due to concerns that groundwater limits are approaching in many areas of the State. The 2005 Legislature enacted Senate Bills 360 and 444 which significantly changed Chapters 163 and 373, F.S., to strengthen the statutory linkage between the regional water supply plans prepared by the water management districts and comprehensive plans prepared by the local governments.

The most significant requirement is the completion of a 10-year Water Supply Facilities Work Plan (Work Plan) by all counties and cities within areas designated as "priority water resource caution areas (PWRCAs)" by the St. Johns River Water Management District in the District Water Supply Plan 2005 (DWSP 2005), approved by its Governing Board in February 2006. PWRCAs correspond to the regional water supply planning areas referred to in State law. These are areas where existing and reasonably anticipated sources of water and conservation efforts may not be adequate to 1) supply water for all existing legal uses and reasonably anticipated future needs and 2) sustain the water resources and related natural systems.

The Work Plan must:

- Project water demands for at least a 10-year period;
- Demonstrate that current and planned water supply facilities and source(s) of water will meet projected demand;

- Be adopted as part of the Potable Water Element of the Comprehensive Plan;
- Be supported by an amendment to the Capital Improvements Element (CIE) to include projects listed in the first five years of the ten-year Work Plan; and
- Be supported by amendments to other Plan elements as needed.

The Work Plan must be found in compliance by the Department of Community Affairs (DCA), with review and comment to DCA provided by the St. Johns River Water Management District (District). Seminole County (County) is located within a "priority water resource caution area", and has therefore prepared this Work Plan. The Work Plan addresses supply and demand for County service areas only. In the future, updates to capital projects of the Work Plan will be part of the annual Comprehensive Plan update of the Capital Improvements Element's five-year capital projects list. The second half of the ten-year project list will be updated annually in the Potable Water Element of the Comprehensive Plan.

BOARD ACTIONS:

July 12, **2006** Local Planning Agency (LPA) recommended adoption of the proposed amendments (6-0).

Jul 18, 2006 Board Work Session: Environmental Services Water and Sewer Capital Improvement Program and Water and Sewer Rates

Aug 8, 2006 Board of County Commissioners – Transmittal Hearing. Board voted 5-0 to transmit proposed amendments to DCA and agencies.

Aug – Oct 2006 Department of Community Affairs (DCA) and other State agencies, including the St. Johns River Water Management District (District), reviewed the transmittal.

Oct 24, 2006 Board of County Commissioners – Adoption hearing continued to December 12, 2006 to enable staff to address the Objections, Recommendations and Comments (ORC) Report from DCA issued October 20, 2006.

Nov 8, 2006 County staff meeting with DCA and District staff to discuss Objections, Recommendations and Comments (ORC) Report.

Dec 12, 2006 Board of County Commissioners - Adoption hearing continued to allow staff time to address the ORC recommendations and bring the Work Plan into compliance with all legislative requirements.

STAFF RECOMMENDATION:

Staff recommends the Board approve the request and authorize the Chairman to execute an ordinance adopting the proposed text amendments to the Capital Improvements, Conservation, Future Land Use, Implementation, Intergovernmental Coordination, and Potable Water Elements of the Seminole County Comprehensive Plan to implement the Water Supply Facilities Work Plan.

ATTACHMENTS:

- 1. Overview of Water Supply Facilities Plan
- 2. Overview of Proposed Amendments
- 3. DCA Objections, Recommendations, and Comments (ORC)
- 4. County Response to ORC
- 5. Water Supply Work Plan Ordinance Part 1
- 6. Water Supply Work Plan Ordinance Part 2
- 7. Water Supply Work Plan Ordinance Part 3
- 8. Economic Impact Statement
- 9. Addendum to Support Document No. 1

Additionally Reviewed By:

Budget Review (Karen Hufman, Lin Polk, Lisa Spriggs)

☑ County Attorney Review (Kimberly Romano)

Revenue Review (Cecilia Monti, Lin Polk, Lisa Spriggs)

OVERVIEW OF WATER SUPPLY FACILITIES WORK PLAN

The Water Supply Facilities Work Plan explains the County's plans for providing potable water over the next ten years to users in unincorporated Seminole County. The Work Plan summarizes existing water supply sources and treatment facilities, current design capacities, permitted withdrawals, current average daily demands, and anticipated growth for the ten-year planning period. The document also indicates planned improvements (capital projects) necessary to implement the County's water-supply strategy.

The Work Plan continues the progressive plan that the County has implemented for the past 10 years. The County's plan is based on economically and environmentally sound solutions for water supply and distribution.

Examples of the proactive nature of the County's program, partnership with SJRWMD and other local utilities in use of alternative water supplies and lower-quality water sources include the following:

- Seminole County submitted a proposed project to SJRWMD for design and construction of a surface-water treatment facility for providing reuse augmentation water to users in the County's service areas. The SJRWMD has adopted this project into its overall Regional Water Supply Plan (RWSP), and agreed to partial funding (SB444) of the project.
- Seminole County has partnered with the Cities of Sanford and Lake Mary to share reclaimed water resources through the North Seminole Regional Reclaimed Water and Surface Water Augmentation System Expansion and Optimization Study. The program, referred to as the "Tri-Party Agreement", was primarily designed as the method used for the City of Sanford to transfer wastewater plant effluent, augmented by surface water, to both the County and Lake Mary.
- The County is also supporting, and investigating methods to participate in use of the City of Sanford's Mill Creek Pond project, which is also part of the overall Tri-Party Agreement. The pond, when completed, will provide over 200 million gallons of reclaimed water (and storm water) storage for the area.
- An additional project via the Tri-Party agreement includes the development of recharge basins within the Sanford City limits, to which Seminole County is contributing funds.

In addition to the above, several types of water projects are either underway or proposed:

Water Supply From the Floridan Aquifer

Seminole County has been identified to be located within a "priority water resource caution area (PWRCA)" by the SJRWMD. The designation as a PWRCA is based on concerns that future groundwater withdrawals from the Upper Floridan Aquifer will reduce the discharge from nearby springs and contribute to migration of high chloride water from the Wekiva River, St. Johns River, the Econlockhatchee River and the Little

Econlockhatchee River. The program involves new wells, treatment facility improvements, and distribution system improvements.

Reuse Water

Seminole County Environmental Services Department (SCESD) currently provides reclaimed water to public access reuse customers in the Northwest and Northeast Service Areas, and is a member of the Tri-Party reuse and Eastern Regional Reclaimed Water System cooperatives. The current system provides approximately 1.9 million gallons per day (mgd) of reclaimed water, from one or both of the County's wastewater treatment facilities, to over 80 commercial users in the Northwest Service Area. In the Southeast Service Area, the County provides bulk purchase of reclaimed water to the City of Oviedo and the University of Central Florida. SCESD is planning expansion of its public access reuse system to additional customers including residential retrofits in the Northwest, Northeast and potentially the Southeast Service Areas.

Water Conservation

Seminole County has consistently participated in water conservation education and infrastructure over the years. Due to recent focus on water planning and the SJRWMD's RWSP, the County expanded its Water Conservation Program. A full-time Water Conservation Coordinator was hired by the SCESD in May 2001 to plan and manage the Program. On January 15, 2007, the County submitted to the SJRWMD for review a consolidated draft Water Conservation Plan for all water service areas. Once accepted, the plan will be finalized and presented to the Board for adoption.

Alternative Water Supply (Water from sources other than the aquifer)

Seminole County's plan for alternative water includes the design and construction of a reuse augmentation surface-water treatment facility at the County's Yankee Lake property. Augmentation of reclaimed water flows from the County's two wastewater treatment facilities is necessary based on the projected reuse-system expansion to handle peak reuse demands. The reuse system expansion, designed to reduce potable groundwater irrigation uses to within proposed CUP limitations, includes residential retrofit projects.

Water Resource Development – New Methods

The SJRWMD is sponsoring an aquifer storage and recovery (ASR) feasibility and testing program within priority water resource caution areas. A desktop assessment of ASR feasibility for Seminole County's North West Service Area (NWSA) was prepared in October 2002. Two sites were evaluated as part of the desktop assessment; the Markham site located approximately 3,000 feet north of the Markham Water Treatment Plan (WTP) and the Yankee Lake property. The results of the desktop assessment indicated that based on the limited amount of available hydrogeologic data, ASR was feasible within the NWSA.

Funding Plan

Established or planned funding sources for the CIP include: current system equity, connection fee receipts, State grants for alternative water only, and outside funding sources. Outside sources are anticipated to be comprised of revenue bonds, and possibly the State Revolving Funds (SRF).

OVERVIEW OF PROPOSED AMENDMENTS

The amendments proposed have been made in accordance with legislative requirements and serve to strengthen the position of the Water Supply Facilities Work Plan (Work Plan) in the Comprehensive Plan and ensure that the St. Johns River Water Management District's Regional Water Supply Plan (RWSP) is considered and coordinated with by the County, and that a ten-year planning period is maintained year-to-year.

Only the key amendments are noted below. Additionally, existing policies which are applicable to and supportive of the Work Plan but not amended have been noted by the underlining of their policy number and title.

Potable Water Element

This element has been significantly revised to add a new objective with policies regarding the Work Plan and revise several other supporting policies. The Work Plan itself follows the Goals, Objectives and Policies and is to be fully adopted into the Comprehensive Plan.

- Issue POT 6 Future Water Supply was revised and Issue POT 7 Water Supply Facilities Work Plan was added.
- Objective POT 5 Coordination of Water and Land Use Management A new objective was added including thirteen new policies. These policies address the requirements for a ten (10) year Work Plan that is updated annually, coordinated with the Regional Water Supply Plan of the St Johns River Water Management District and is linked to the land use planning process through population projections based on buildable acres by future land use being the starting input for water demand projections and through the implementation of concurrency policies ensuring permits are not issued when capacity is not available.
- Water Supply Facilities Work Plan A new text section was added to the Element.
 This section and associated exhibits serves to set out the current extent and project schedule of the Work Plan. Changes are made by amendment to the Comprehensive Plan and, where appropriate, are incorporated into the Capital Improvements Element.

Capital Improvements Element

The Exhibits of the Capital Improvements Element (CIE) are updated annually for each of the Comprehensive Plan's facility elements. Within each element's section, a comparison of projected service demand with available and planned capacity is prepared and a five (5) year listing of facility projects is presented. The project listing of capital projects is tested for financial feasibility – the fund dollars that are matched with projects represent dollars which the Board of County Commissioners has authority over without reliance on public referendum or are guaranteed by an interlocal agreement or contract. For the Work Plan, the key capital projects during the next five-year period are included from the Work Plan in the Potable Water Element.

Conservation Element

This element directs that the Work Plan identify and implement a variety of water strategies that will enable the County to meet current and future projected demands in a manner consistent with and coordinated with the Regional Water Supply Plan.

- Issue CON 3 Ground Water Supply This issue was updated.
- Policy CON 1.17 Ten-Year Water Supply Facilities Work Plan Water Supply Plan –
 Policy added. Directs that ten-year Work Plan be implemented in the Potable Water
 Element.
- Policy CON 1.18 Coordination with Regional Water Supply Plan Policy added. Directs that the most current Regional Water Supply Plan be coordinated during the annual update of the Work Plan.
- Policy CON 1.19 Articulation of Water Conservation and Reuse Programs and Policies – Policy added. Notes that program and practices can be found in the Potable Water Element.

Future Land Use Element

The following are to be considered in implementing the Work Plan:

- Issue FLU 1 Concurrency Management Revised to add concurrency requirements from Section 163.31870(2) regarding water, parks and recreation and transportation concurrency.
- Policy FLU 6.2 Concurrency Requirements The existing policy was updated to address additional concurrency requirements.

<u>Implementation Element</u>

This element sets out the County's Concurrency Management System. Of the numerous policies, the following is most relevant to the Work Plan, linking sufficient facility capacity to the demands of development:

Policy IMP 2.5 Development Orders: Capacity Determinations and Availability – The
existing policy was updated to meet concurrency requirements. Sets standards for
determining the availability of public facility capacity concurrent with the impact of
development orders or permits.

Intergovernmental Coordination Element

This element lists a variety of ways in which the County shall attempt to coordinate with other jurisdictions and entities. Although joint planning agreements are not yet established with each city, the County is continuing to actively work on securing such agreements with each of the cities.

• Policy IGC 3.3 Plan Coordination – The policy was revised to add emphasis on ensuring coordination with the Regional Water Supply Plan.

DEPARTMENT OF COMMUNITY AFFAIRS OBJECTIONS, RECOMMENDATIONS AND COMMENTS

FOR

SEMINOLE COUNTY

AMENDMENT 06-RWSP1

October 20, 2006 Division of Community Planning Bureau of Local Planning

This report is prepared pursuant to Rule 9J-11.010, F.A.C.

OBJECTIONS, RECOMMENDATIONS AND COMMENTS FOR SEMINOLE COUNTY AMENDMENT 06-RWSP1

I. CONSISTENCY WITH CHAPTER 163, PART II, F.S.; and RULE 9J-5, F.A.C.

The proposed Amendment 06-RWSP1 consists of amendments to four plan elements (Conservation Element; Capital Improvements Element; Intergovernmental Coordination Element; and Potable Water Element) to address the requirements of the Wekiva Parkway and Protection Act (Chapter 369, Part III, Florida Statutes) for a 10 Year Water Supply Facility Work Plan. The Wekiva Parkway and Protection Act requires local governments within the Wekiva Study Area to amend (by December 1, 2006) their comprehensive plans to include an up-to-date 10-year water supply facility work plan for building potable water facilities necessary to serve existing and new development and for which the local government is responsible as required by Section 163.3177(6)(c), Florida Statutes. The Department raises the following objections to proposed Amendment 06-RWSP1:

1. <u>Objection:</u> The Amendment 06-RWSP1 does not amend the Comprehensive Plan, supported by appropriate data and analysis, to adequately include a 10 Year Water Supply Facility Work Plan consistent with the requirements of the Wekiva Parkway and Protection Act and coordinated and consistent with the District Water Supply Plan of the St. Johns River Water Management District.

The amendment lacks appropriate supporting data and analysis addressing the projected demand for potable water and demonstrating coordination and consistency of the projected demand with the St. Johns River Water Management District Regional Water Supply Plan and Water Supply Assessment. For example, the County's Work Plan (Table 3-3) shows the total demand for the four major service areas in year 2015 as 28.550 million gallons per day which is greater than the year 2025 projected demand of 28.09 million provided in District's Water Supply Assessment plan.

The amendment does not include appropriate policies articulating the County's water conservation program and water reuse program. In addition, the proposed Comprehensive Plan policies do not address the water supply concurrency management requirements of Section 163.3180(2)(a), F.S., that went into effect July 1, 2005. Section 163.3180(2)(a), F.S., requires the County's Comprehensive Plan and land development regulations address the following: (1) ensure that adequate water supplies and facilities are available to serve new development no later than the date on which the County anticipates issuing a certificate of occupancy; and (2) consultation with the applicable water supplier during the permit review process and prior to the approval of a building permit, to determine if adequate water supplies will be available to serve the development by the anticipated issuance date of the certificate of occupancy. These requirements were not appropriately addressed in the proposed amendment.

The proposed amendment (Potable Water Element Policy 5.1) intends to incorporate by reference the water supply work plan into the Comprehensive Plan. However, the amendment does not appropriately accomplish this incorporation (adoption) by reference because Policy 5.1 does not appropriately identify the title and author of the document to be incorporated by reference and clearly indicate what provisions and edition of the document is being adopted.

The water supply work plan does not identify the funding sources for each water supply work plan project. The data and analysis of the Capital Improvements Element is not revised to include an inventory of the capital projects identified in the water supply work plan that the County is currently seeking to implement. The amendment is not supported by data and analysis demonstrating that the water supply projects listed in the first five years of the 10 year water supply work plan are included in the Capital Improvements Element Five-Year Schedule of Capital Improvements.

The County's Water Supply Work Plan does not appropriately identify the amounts of water associated with each water conservation practice and then identify the amount of potable water demand that will be reduced (offset) by water conservation. The County's Water Supply Work Plan does not appropriately identify the amounts of potable water demand that will be reduced (offset) from water reuse.

The County's Water Supply Work Plan does not appropriately consider and include the alternative water supply projects identified in the District Water Supply Plan of the St. Johns River Water Management District (SJRWMD) as a means to meet the projected water demand rather than relying on increased groundwater withdrawal.

The County's Water Supply Work Plan does not include the county planning process that is being undertaken with other local governments regarding alternative water sources and indicate the decision-making steps and timeframes relative to the planning process.

[Rules 9J-5.005(2, 5, and 6); 9J-5.006(1, 2, and 3); 9J-5.011(1 and 2); and 9J-5.013(1, 2, and 3); 9J-5.015(1, 2, and 3); 9J-5.016(1, 2, 3, and 4), Florida Administrative Code (F.A.C.); and Sections 163.3177(6)(a, c, d, e, and h); 163.3177(2, 3, 4, 8, and 10); and 369.321, Florida Statutes]

Recommendation: Revise the amendment to include the water supply facilities plan (by Reiss Environmental, August 2006) as supporting data and analysis and demonstrate that the water supply facilities plan meets the requirements of the Wekiva Parkway and Protection Act and is appropriately coordinated and consistent with the District Water Supply Plan of the St. Johns River Water Management District. Coordinate with the St. Johns River Water Management District and revise the analysis of the projected demand for potable water to be coordinated with St. Johns River Water Management District Water Supply Plan and Water Supply Assessment. Revise the supporting analysis and the 10 Year Water Supply Facility Work Plan to identify the amounts of water associated with each water conservation practice and the amount of potable water demand that will be reduced (offset) by water conservation. Revise the supporting data and analysis and the 10 Year Water Supply Facility Work Plan to identify the

amounts of potable water demand that will be reduced (offset) from water reuse. Revise the supporting data and analysis and the 10 Year Water Supply Facility Work Plan to appropriately consider and include the alternative water supply projects identified in the District Water Supply Plan of the St. Johns River Water Management District as a means to meet the projected water demands rather than relying on increased groundwater withdrawal. Revise the adopted portion of the Potable Water Element to include the 10 Year Water Supply Facility Work Plan (Work Plan) and clearly identify the documents that comprise the Work Plan. Revise the Work Plan to identify the funding sources for each project. Revise the data and analysis of the Comprehensive Plan Capital Improvements Element to include (inventory) the capital improvement projects recommended by the Work Plan. Revise the amendment to include a financially feasible Capital Improvements Element Five-Year Schedule of Capital Improvements which includes the first five years of the water supply facilities improvement projects recommended by the Work Plan and coordinated with the Potable Water Element. Include plan policies to appropriately address the water supply facilities requirements of the Wekiva Parkway and Protection Act. Include plan policies addressing the concurrency requirements of Section 163.3180(2)(a), F.S. We recommend the County coordinate with the St. Johns River Water Management District and the Department while formulating a response to this report.

II. CONSISTENCY WITH STATE COMPREHENSIVE PLAN

Objection: The proposed Comprehensive Plan Amendment 06-RWSP1 is not consistent with and does not further the following provisions of the State Comprehensive Plan (Chapter 187, Florida Statutes) for the reasons noted in the objections raised above in Section I:

- (a) Goal 7.a (Water Resources); Policies 7.b.1, 7.b.5, 7.b.9, 7.b.10, and 7.b.11;
- (b) Goal 9.a (Natural Systems and Recreational Lands); Policies 9.b.1, 9.b.2, and 9.b.10.
- (c) Goal 15.a (Land Use); Policies 15.b.1, 15.b.2, 15.b.6;
- (d) Goal 17.a (Public Facilities); Policy 17.b.1; and
- (e) Goal 25.a (Plan Implementation); Policy 25.b.7.

<u>Recommendation:</u> Revise the plan amendment as recommended for the objections raised above.

Seminole County Response

To DCA ORC Report Recommendations Re: Water Supply Facilities Work Plan Amendment

Attached is a table detailing the County's response to each of the Department of Community Affairs (DCA) recommendations re: the August 8^{th} , 2006, transmittal copy of the County's Water Supply Facilities Work Plan. The table lists each DCA recommendation on the left and the County's response on the right.

Seminole County Response To DCA ORC Report Recommendations Re: Water Supply Facilities Work Plan Amendment

	ORC Recommendations		Response/ Action/ Location
1	Revise the amendment to include the water supply facilities plan (by Reiss Environmental, August 2006) as supporting data and analysis;	•	Policy POT 5.1 - Ten Year Water Supply Facilities Work Plan directs adoption and incorporation of the Work Plan into the Potable Water Element of the Comprehensive Plan. The Reiss document has been revised and is now Support Document #1. The Work Plan that was formerly in the Reiss document is now adopted directly into the Potable Water Element of the Comprehensive Plan as its own separate text section.
2	Demonstrate that the water supply facilities plan meets the requirements of the Wekiva Parkway and Protection Act;	•	Compliance with the Wekiva Act is detailed in <i>Issue POT 7 Water Supply Facilities Work Plan – Meeting the Legislative Requirements</i> section of the Potable Water Element.
3	Demonstrate that the water supply facilities plan is appropriately coordinated and consistent with the District Water Supply Plan (DWSP 2005) of the SJRWMD;	•	Coordination and consistency is detailed in the Introduction section of the Work Plan of the Potable Water Element under the heading of "Compliance with Ch 163, F.S. and the Regional Water Supply Plan (DRWSP 2005)"
4	Coordinate with the District and revise the analysis of the projected demand for potable water to be coordinated with the District Water Supply Assessment (DWSA 2003) and District Water Supply Plan 2005 (DWSP 2005);	•	Exhibit POT: Projections of Service Area Potable Water Demands/Permitted Groundwater Capacity in support of the Work Plan details demand projections. The table was reviewed and accepted by the SJRWMD in their most recent discussions with the County. The table figures replace and supersede previous figures prepared relative to the District's Water Supply Assessment of 2003.
5	Revise the supporting analysis and 10-Year Water Supply Facility Work Plan (Work Plan) to identify the amounts of water associated with each water conservation practice, to identify the amount of potable water demand that will be reduced (offset) by water conservation; and to identify the amounts of potable water demand that will be reduced (offset) from water reuse;	•	Exhibit POT: Projected Water Use Consolidated in support of the Work Plan details these quantities of water associated with conservation and reuse and the potable water offset of each. This table is the basis for the County's current Consumptive Use Permit and has been accepted by the District as part of the application.
6	Revise the supporting data and analysis and the 10 Year Water Supply Facility Work Plan to appropriately consider and include the alternative water supply projects identified in the DWSP 2005 as a means to meet projected water demands rather than relying on increased groundwater withdrawal;	•	Section V – Alternative Water Supply Projects of the Work Plan each note methods by which the County shall be reducing the demand on ground water resources

	ORC Recommendations	Response/ Action/ Location
7	Revise the adopted portion of the Potable Water Element to include the 10 Year Work Plan and clearly identify the documents that comprise the Work Plan;	 Policy POT 5.1 - Ten Year Water Supply Facilities Work Plan – Adopts and incorporates the Work Plan within the Potable Water Element of the Comprehensive Plan. The Work Plan notes in the Introduction the titles and dates of publication of the three support documents which provide the necessary data and analysis for the Work Plan.
8	Revise the Work Plan to identify the funding sources for each project;	The Work Plan notes under Section I – Water facility Planning, subsection D Work Plan Project Funding, funding sources for the major Work Plan projects are identified. Since the primary funds are bonds, a global assignment to the capital projects has been done with the details noted in the footnote to Exhibit POT – Major Work Plan Capital Projects.
9	Revise the data and analysis of the Capital Improvements Element (CIE) to include (inventory) the capital projects recommended by the Work Plan;	 Exhibit POT – Major Work Plan Capital Projects is a list of the major capital projects included in the Work Plan. Exhibit CIE – Five Year Capital Schedule of Improvements – Water Supply Work Plan Projects is the same list, the first five years, added to the Capital Improvements Element (CIE).
10	Revise the amendment to include a financial feasibility CIE Five-Year Schedule of Capital Improvements which includes the first five years of the water supply facilities improvement projects recommended by the Work Plan and coordinated with the Potable Water Element;	• The Work Plan notes under Section I.D "Work Plan Project Funding" addresses the financially feasible funding of the Work Plan. Financial feasibility will also be addressed in the annual CIE for all the Work Plan projects, both the key projects and any associated sub-projects. The proposed Policy CIE 1.12 Maintaining Consistency With Water Supply Facilities Work Plan and Policy POT 5.2 Consistency of the Work Plan with the Capital Improvements Element both direct the placement of the first five-years of the 10 year Work Plan in the CIE. The CIE itself is annually evaluated for and demonstrated to be financially feasible.
11	Include plan policies to appropriately address the water supply facilities requirements of the Wekiva Parkway and Protection Act (Wekiva Act): Chapter 369.321 (4), F.S. (Wekiva Act) - By December 1, 2006, an up-to-date 10-year water supply facility work plan for building potable water facilities necessary to serve existing and new development and for which the local government is responsible as required by s. 163.3177(6)(c);	 Issue POT 7 Water Supply Facilities Work Plan – Meeting the Legislative Requirements describes the County's compliance with the Wekiva Act. Policy POT 5.11 – Compliance with the Wekiva Parkway and Protection Act was added.

ORC Recommendations

12 Include plan policies addressing the concurrency requirements of Section 163.3180(2)(a), F.S.: Consistent with public health and safety, sanitary sewer, solid waste, drainage, adequate water supplies, and potable water facilities shall be in place and available to serve new development no later than the issuance by the local government of a certificate of occupancy or its functional equivalent. Prior to approval of a building permit or its functional equivalent, the local government shall consult with the applicable water supplier to determine whether adequate water supplies to serve the new development will be available no later than the anticipated date of issuance by the local government of a certificate of occupancy or its functional equivalent. A local government may meet the concurrency requirement for sanitary sewer through the use of onsite sewage treatment and disposal systems approved by the Department of Health to serve new

development.

Response/ Action/ Location

The following policies have been added to the proposed amendment:

- Policy CIE 3.4 (revised) Concurrency Management
- Policy FLU 6.2 (revised) Concurrency Requirements
- Policy IMP 2.5 (revised) Development Orders: Capacity Determinations and Availability
- Policy POT 5.12 (new) Concurrency Requirements for Potable Water

AMENDING THE VISION ORDINANCE 2020 SEMINOLE COUNTY COMPREHENSIVE PLAN: AMENDING THE TEXT OF THE CAPITAL IMPROVEMENTS, CONSERVATION, FUTURE LAND USE, IMPLEMENTATION, INTERGOVERNMENTAL COORDINATION, AND POTABLE WATER ELEMENTS OF THE COMPREHENSIVE PLAN; PROVIDING FOR LEGISLATIVE FINDINGS; PROVIDING FOR SEVERABILITY; PROVIDING FOR CODIFICATION; AND PROVIDING FOR AN EFFECTIVE DATE.

WHEREAS, the Board of County Commissioners of Seminole County (hereinafter referred to as the "Board") enacted Ordinance Number 91-13, adopting the 1991 Seminole County Comprehensive Plan, which was subsequently amended in accordance with State law; and

WHEREAS, the Board enacted Ordinance Number 2001-21, which renamed the 1991 Seminole County Comprehensive Plan to the "Vision 2020 Seminole County Comprehensive Plan" (hereinafter referred to as the "Plan"); and

WHEREAS, the Board has followed the procedures set forth in Sections 163.3184 and 163.3187, Florida Statutes, in order to further amend certain provisions of the Plan as set forth herein relating to Large Scale Plan Amendments; and

WHEREAS, the Board has substantially complied with the procedures set forth in the Implementation Element of the Plan regarding public participation; and

WHEREAS, the Seminole County Land Planning Agency held a public hearing with all required public notice for the purpose of providing recommendations to the Board of County

Commissioners with regard to the Plan amendments set forth herein; and

WHEREAS, the Board held public hearings with all required public notice for the purposes of hearing and considering the recommendations and comments of the general public, the Land Planning Agency, other public agencies, and other jurisdictions prior to final action on the Plan amendments set forth herein; and

WHEREAS, the Board hereby finds that the Plan, as amended by this Ordinance, is internally consistent with and compliant with the provisions of State law including, but not limited to, Part II, Chapter 163, Florida Statutes, and the State Comprehensive Plan, and the Strategic Regional Policy Plan of the East Central Florida Regional Planning Council; and

WHEREAS, the Plan amendments set forth herein have been reviewed by all required State agencies and the Objections, Recommendations and Comments Report prepared by the Department of Community Affairs has been considered by the Board; and

WHEREAS, the Seminole County Home Rule Charter requires that an Economic Impact Statement be prepared to address the potential fiscal impacts and economic costs of each text amendment enacted by this Ordinance upon the public and taxpayers of Seminole County and such Economic Impact Statement has been prepared and has been made available for public review

and copying prior to the enactment of this Ordinance in accordance with the provisions of the Seminole County Home Rule Charter,

NOW, THEREFORE, BE IT ORDAINED BY THE BOARD OF COUNTY COMMISSIONERS OF SEMINOLE COUNTY, FLORIDA:

Section 1. Legislative Findings. The above recitals are true and correct in form and include legislative findings, which are a material part of this Ordinance.

Section 2. Text Amendments. The text of the Plan is hereby amended as set forth in Exhibit A (attached hereto and incorporated herein by this reference) as noted in the following table:

Ord.	Attach-	Amendment	Amended	LPA	BCC
Exh.	xh. ment Numbers		Elements	Hearing	Hearing
	Number			Date	Dates
A	Attach-	06EX.TXT03.1.01	Potable	07/12/	07/18/2006,
	ment 1	through .33	Water	2006	08/08/2006,
		consecutively			10/24/2006,
					12/12/2006,
					11/13/2007
	Attach-	06EX.TXT03.2.01,	Capital	Same	Same
	ment 2	.02, .03, .04	Improvements		
	Attach-	06EX.TXT03.3.01	Conservation	Same	Same
	ment 3	through .07			
	Attach-	Notation only -	Drainage	NA	Same
	ment 4	not amended			
	Attach-	06EX.TXT03.4.01,	Future Land	Same	Same
	ment 5	.02, .03, .04	Use		
	Attach-	06EX.TXT03.5.01	Implementa-	Same	Same
	ment 6		tion		
	Attach-	06EX.TXT03.6.01	Intergovern-	Same	Same
	ment 7		mental Coor-		
			dination		

Section 3. Severability.

- (a) The enactment of this Ordinance includes six (6) text amendments.
- (b) If any provision of this Ordinance or the application thereof to any person or circumstance is held invalid, it is the intent of the Board of County Commissioners that the invalidity shall not affect other provisions or applications of this Ordinance which can be given effect without the invalid provision or application, and to this end the provisions of this Ordinance are declared severable.

Section 4. Exclusion from County Code/Codification.

- (a) It is the intent of this Board that the provisions of this Ordinance shall not be codified into the Seminole County Code, but that the Code codifier shall have liberal authority to codify this Ordinance as a separate document or as part of or as a volume of the Land Development Code of Seminole County in accordance with prior directions given to the said Code codifier.
- (b) The Code codifier is hereby granted broad and liberal authority to codify and edit the provisions of the Seminole County Comprehensive Plan, as amended.

Section 5. Effective Date.

(a) A certified copy of this Ordinance shall be provided to the Florida Department of State by the Clerk of the Board of

County Commissioners in accordance with State law.

This Ordinance shall take effect upon filing a copy of this Ordinance with the Florida Department of State by the Clerk of the Board of County Commissioners; provided, however, that the effective date of the Plan amendments set forth herein shall twenty-two (22) days after the Florida Department be Community Affairs' publication of a notice of intent to find the Plan amendments in compliance if no affected party challenges the Plan amendments, or, if an affected party challenges the Plan amendments, when a final order is issued by the Florida Department of Community Affairs or the Administration Commission determining that the amendments are in compliance in accordance with Section 163.3184, Florida Statutes, whichever occurs No development orders or development permits, earlier. if dependent upon an amendment, may be issued or commence before an amendment has become effective. Τf final а order $\circ f$ noncompliance is issued by the Administration Commission adopting a resolution affirming its effective status, a copy of which resolution shall be provided to the Florida Department of Community Affairs, Bureau of Local Planning, 2555 Shumard Oak Boulevard, Tallahassee, Florida 32399-2100 by the Clerk of the Board of County Commissioners.

ENACTED this 13th day of November 2007.

BOARD OF COUNTY COMMISSIONERS SEMINOLE COUNTY, FLORIDA

By:_			
	CARLTON D.	HENLEY,	Chairman

Water Supply Facilities Work Plan - Exempt Large Scale Amendment to the Comprehensive Plan

EXHIBIT A

Amended pages to Elements of the Comprehensive Plan are presented under the following attachment headings.

Where a policy has not been added or revised but is being noted only because of its applicability to the Work Plan, the policy number and title have been underlined. These underlines will not be reflected in the amended plan and are not given Amendment Numbers..

Attachment Title	Amendment Numbering
Potable Water Element	06EX.TXT03.1.01 through .33
Capital Improvements Element	06EX.TXT03.3.01, .02, .03, .04
Conservation Element	06EX.TXT03.2.01 through .07
4. Drainage Element	Notation Only
5. Future Land Use Element	06EX.TXT03.4.01, 02, 03, 04
6. Implementation Element	06EX.TXT03.5.01
7. Intergovernmental Element	06EX.TXT03.6.01

ATTACHMENT 1

Amendments to the Potable Water Element (06F.TXT03.1)

- Revision to Introduction
- Revision to Issues and Concerns
- Revision to Goals, Objectives and Policies
- Addition of new text section entitled: "Water Supply Facilities Work Plan
- Revision to Exhibits

(Note: The amendments have been inserted directly into the appropriate Comprehensive Plan pages in strike and underlined format indicating deletion and addition respectively. Objectives or policies simply being noted as supportive of the Work Plan have their titles underlined.)



POTABLE WATER ELEMENT INTRODUCTION

As of 2007, Ppotable water is pumped from the ground, treated and distributed to residential and non-residential unincorporated Seminole County users through County, city and private water systems. –The County currently provides potable water service to four (4) major service areas in the unincorporated area:

owns and operates nine water treatment plants in three service areas:

- A• Southwest Service Area --Served by the Lynwood plant; In 2004, Seminole County purchased seven (7) privately owned water treatment and distribution systems from Florida Water Services (FWS), which are now considered part of the Southwest Service Area (SWSA), although the service areas are not adjacent. One of the treatment facilities was abandoned since the purchase, and only the distribution system in that area is now maintained. The SWSA is supplied by the following water treatment plants (WTP) and other facilities all of which were former FWS utilities, except for Lynwood: Lynwood, Apple Valley, Dol Ray Manor, Druid Hills, Fern Park, Lake Brantley, Lake Harriet Estates, and Meredith Manor;
- Bo Southeast Service Area Served by the Consumers, Indian Hills, and Lake Hayes plants WTPs; and
- Northwest Service Area Served by the Heathrow, Hanover Woods, Lake Monroe and Markam WTPs.; and Country Club, and Greenwood Lakes plants.
- Northeast Service Area Served by the Country Club and Greenwood Lakes WTPs.

Additional potable water service is provided to <u>portions of unincorporated users areas</u> by <u>the several cityies and private water providers as detailed in the Work Plan.</u> of Altamonte Springs, Casselberry, Lake Mary, Oviedo and Sanford, and by two major private water utilities.

The County operates the potable water system as a fee-based enterprise. To ensure a continued supply of water, the Water and Wastewater Division of the County's Environmental Services Department does-prepares an annual budget and five-year capital plan for maintenance, replacement and capacity expansion based on a five_-year master plan. Additionally, the County works-coordinates with the cities and private utilities to share wholesale service and coordinates works with the St Johns River Water Management District regarding the long term projected growth of demand for water services in Seminole County.

In 2002, 2004, and 2005, the Florida Legislature added additional requirements for the long term planning and coordination of the use of all available water supplies. These requirements are being addressed by a Comprehensive Plan amendment to the Potable Water Element in 2007. These amendments are more fully discussed in the Issues and Concerns section of this Element.

In the past decadeSince the early 1990's, public health and safety has been furthered by the expansion of the water fluoridation program and the adoption of a cross-connection control (backflow prevention) ordinance to reduce the chance of water contamination within the distribution system. Additionally, the Public Safety Department operates an underground fuel storage tank replacement program to reduce the possibility of ground water supply contamination.

(Revised: Amendment 06EX.TXT03.1.01, Ordinance 2007-XX, 11/13/2007)





The County requires <u>all new developments to sign</u> wastewater reuse agreements where <u>reuse water is or will be</u> available—<u>of all new development</u>. Other methods to increase conservation include public education; periodic amendment of the Building Code requirements to require use of water saving devices in development; amendment of the Land Development Code to require the use of drought tolerant <u>plant</u> species and water conserving irrigation techniques (known as Xeriscaping); and application of a surcharge for excessive consumption.— Approved conservation methods <u>should</u>—<u>may</u> be used singly or in combination on a site-specific basis.

Additionally, St. Johns River Water Management District (SJRWMDDistrict) and Seminole County have a joint agreement to equally share the cost of permanently plugging abandoned artesian wells in Seminole County, with owner consent. Abandoned wells are plugged by pumping grout cement through PVC pipe into the bottom of the well. Since the SJRWMDDistrict-Seminole County Cost Share Program began in 1992, over 229 wells have been permanently plugged or repaired resulting in the reduction of approximately 22 million gallons per day from flowing onto the ground.

Issue POT 5 Levels Of Service

The State requires that local jurisdictions assure that <u>adequate water supplies and potable</u> water facilities meeting the adopted level of service, shall be in place and available to serve new development no later than the issuance by the County of a certificate of occupancy or its functional equivalent. Prior to approval of a building permit, or its functional equivalent, the County shall consult with the applicable water supplier to determine whether adequate water supplies to serve the new development will be available no later than the anticipated date of issuance by the County of a certificate of occupancy or its functional equivalent. adopted levels of water service be maintained concurrent with the demand for those services.

The Goals, Objectives and Policies section establishes the County's level of service as 350 gallons of water per day (average daily flow) per Equivalent Residential Connection (ERC) for each individual service area. The amount of peak treatment facility capacity required is established as a minimum of 2.0 times the average daily flow. These levels of service shall also be applied for planning purposes to private and city utilities serving unincorporated customers unless a different level of service is authorized by the Florida Department of Environmental Protection or is adopted in a comprehensive plan.

The County will continue to operate in compliance with all rules and requirements of FDEP, including, but not limited to, peak day, peak hour and service pressure requirements.

Issue POT 6 Future Water Supply

During 2000 and 2001, the St Johns River Water Management District (District) has worked to identify the water needs of the District through the year 2020. For the last 15 years, the District's water supply planning and assessment investigations have documented that the rate of withdrawal of groundwater in certain areas of the District is approaching the maximum rate that can be sustained without causing unacceptable adverse impacts to the water resources and related natural systems. Water supply planning results to date show that at some locations, withdrawal rates will likely approach or reach sustainable limits in the foreseeable future, well within the current 20-year planning horizon.



The 2005 District Water Supply Plan (DWSP 2005) [also known as the Regional Water Supply Plan, (RWSP)] addressed current and future water use, traditional and alternative water sources, and water conservation efforts required to meet 2025 water supply needs, while sustaining water quality and protecting wetland and aquatic systems. It was adopted by the Governing Board in February 2006. The DWSP 2005 was designed to meet the requirements of the water supply planning provisions of Section 373, Florida Statutes (F.S.), and was based on a planning horizon extending through 2025. (The above text for this section was excerpted from: Technical Publication SJ2006-2, District Water Supply Plan, 2005)

The results of the DWSP 2005 -indicate the potential need for new regional facilities, new water storage methods and a much stricter consumptive use permitting for new and existing wells. The County will continue to be fully engaged in the regional process of addressing and resolving future water supply these issues.

(Revised: Amendment 06EX.TXT03.1.02, Ordinance 2007-XX, 11/13/2007)

Issue POT 7 Water Supply Facilities Work Plan

In 2002, 2004, and 2005 the Legislature expanded the local government comprehensive plan requirements to strengthen coordination of water supply planning and local land use planning. Stronger coordination requirements resulted from concerns that groundwater withdrawals are approaching their limit in many areas of the State, and that alternative supplies must be identified, quantified and developed. These actions were envisioned as necessary additions to the implementation of local water conservation strategies and Florida Department of Environmental Protection permitted water reuse programs.

The most significant requirement was completion of a 10-year Water Supply Facilities Work Plan (Work Plan) by all counties and cities within areas designated as "priority water resource caution areas" (PWRCAs) by the District in the DWSP 2005. The DWSP 2005 was approved by its District Governing Board in February 2006. PWRCAs correspond to the regional water supply planning areas referred to in State law. These are areas where existing and reasonably anticipated sources of water and conservation efforts may not be adequate to 1) supply water for all existing legal uses and reasonably anticipated future needs, and 2) sustain the water resources and related natural systems.

The Work Plan must identify the current and planned water supply facilities and source(s) of water that will meet the projected demand within the local government's jurisdiction and must be adopted as part of the Potable Water Element. The Capital Improvements Element must also be amended to include projects listed in the first five years of the ten-year Work Plan. Additionally, appropriate goals, objectives and policies of these and other Plan elements must be amended or put in place in support of the Work Plan.

In 2006, the County began the amendment process to incorporate the Work Plan as required by law. Once adopted, the Work Plan shall be amended within eighteen months of the DWSP 2005 being updated. Annual updates of capital projects to maintain consistency with the Capital Improvements Element shall also be accomplished.





Meeting the Legislative Requirements

Wekiva Parkway and Protection Act (Wekiva Act) - Chapter 369, Part III - The Wekiva Act required the County to amend its comprehensive plan by December 1, 2006, to include an up-to-date 10-year Water Supply Facility Work Plan (Work Plan) for building potable water facilities necessary to serve existing and new development and for which the local government is responsible, as required by s. 163.3177(6)(c), F.S.

The County is meeting the requirements of the Wekiva Act by adopting a Work Plan that addresses both County facilities and service areas as well as service to unincorporated users outside County service areas by city and private water utilities. In doing so, the County is progressing toward addressing the full requirements of Chapter 163, F.S. The County transmitted its proposed Work Plan on August 8, 2006, to the Department of Community Affairs (Department) and the St Johns River Water Management District (District) for review and comment with the intent of adopting the Work Plan prior to the deadline. Following receipt of the Department's Objections, Recommendations and Comments (ORC) Report, County staff met with Department and District staff regarding the ORC and decided to continue the adoption hearing of the Work Plan to 2007 to allow time to properly address the Department's recommendations.

Chapter 163, Florida Statutes (F.S.) - (Chapter 163.3177(6)(c)) — Within 18 months after the District Governing Board approves an updated regional water supply plan, the elements [Potable Water, et al] must incorporate the alternative water supply project or projects selected by the local government from those identified in the regional water supply plan pursuant to s. 373.0361(2)(a) or proposed by the local government under s. 373.0361(7)(b), F.S.

The element must identify such alternative water supply projects and traditional water supply projects and conservation and reuse necessary to meet the water needs identified in s. 373.0361(2)(a), F.S., within the local government's jurisdiction and include a work plan, covering at least a 10 year planning period, for building public, private, and regional water supply facilities, including development of alternative water supplies, which are identified in the element as necessary to serve existing and new development. The work plan shall be updated, at a minimum, within 18 months after the governing board of a water management district approves an updated regional water supply plan, generally done every five (5) years.

The adoption of the Work Plan into the Potable Water Element in conjunction with other Comprehensive Plan amendments will meet the requirements of both the Wekiva Act and Chapter 163.

(Added: Amendment 06EX.TXT03.1.03, Ordinance 2007-XX, 11/13/2007)





POTABLE WATER ELEMENT GOAL, OBJECTIVES AND POLICIES

GOAL

The County shall provide quality public water facilities to serve existing and future development needs in a cost efficient, highly reliable, and environmentally sound manner.

OBJECTIVE POT 1 ENVIRONMENTAL AND CONSERVATION POLICIES

The County shall ensure that the provision of water service and the operation of water treatment facilities under its control is accomplished in a manner which will minimize to the maximum practicable extent, any adverse impacts on the environment, public safety, residential neighborhoods and/or surrounding properties through the implementation of the following policies:

Policy POT 1.1 Back Flow Prevention

The County shall enforce it's backflow prevention ordinance that enables the County to require inspection, testing and maintenance of backflow devices as well as the retrofitting of existing facilities to meet the requirements of the ordinance. The ordinance also provides for the use of sanctions such as citations and/or disconnection if standards are not met.

Policy POT 1.2 Safe Drinking Water Act

The County shall monitor amendments to the Safe Drinking Water Act, as amended. Significant amendments shall be brought to the Board's attention in a timely manner through a preliminary impact analysis statement provided to the Board by the Department of Environmental Services describing the range of known solutions, estimated cost of each and a future timetable to precisely identify the most appropriate and cost effective method of compliance.

Policy POT 1.3 Fluoridation

The County shall continue the existing program of water fluoridation.

Policy POT 1.4 Water Conservation Program

- A The County shall ensure that current and proposed conservation practices meet or exceed conditions of the current Consumptive Use Permit (CUP), and
- B Ensure such practices are consistent with conservation practices identified in the CUP technical staff report, and
- C Ensure these practices are incorporated into the Potable Water Element's Water Supply Facilities Work Plan.

(Added: Amendment 06EX.TXT03.1.04, Ordinance 2007-XX, 11/13/2007)

Policy POT 1.54 Conservation Devices

Each update of the Land Development Code or Building Code shall include new requirements or revisions for water conservation devices and methods as needed. Such methods might include but are not limited to provisions for the use of drought tolerant species and water conserving irrigation techniques (Xeriscaping), and surcharges for excessive consumption. —Approved conservation methods shall be used singly or in combination on a site-specific basis. The County shall coordinate with SJRWMD the





<u>District</u> to reduce groundwater withdrawals for non-essential uses that consume large quantities of water (i.e. the filling of decorative fountains and ponds).

Policy POT 1.65 Emergency Water Conservation

The County shall continue to have and shall amend, as necessary, the emergency water conservation ordinance to enable the County to limit water usage by methods that may include, but are not limited to, citations with fines in order to enforce restrictions, and surcharges for excessive consumption and use methods as are otherwise authorized by law. The ordinance shall, at a minimum, be consistent with the St. Johns River Water Management District's Emergency Water Conservation requirements.

Policy POT 1.76 Effluent Reuse

The County shall continue to require all development to enter into effluent reuse agreements as a condition of sewer service. –Actual implementation of such agreements shall be based on, but not limited to, the following considerations: availability of effluent supply, distance from the facility, the nature of the soils and the nature of the development. Additionally:

- A The County shall ensure that current and proposed reuse practices meet or exceed conditions of Consumptive Use Permit (CUP), and
- B Ensure such practices are consistent with the reuse practices identified in the CUP technical staff report, and,
- C Ensure current and proposed reuse practices are consistent with the Regional Water Supply Plan, including the 2004 interim update, and other related reuse plans, and
- <u>D</u> Ensure these practices are incorporated into the Potable Water Element's Water Supply Facilities Work Plan.

(Revised: Amendment 06EX.TXT03.1.05, Ordinance 2007-XX, 11/13/2007)

Policy POT 1.87 Required Connection to Central Water Service

The County shall require within the unincorporated urban area, as described in *Exhibit FLU: Urban/Rural Boundary*, connection to central water service where available as defined by Chapter 64E-6, F.A.C. or when a County capital project is scheduled and authorized to begin construction in the County's then current adopted annual budget or construction is committed to begin within one (1) year in an enforceable schedule contained within a binding developer's agreement.





OBJECTIVE POT 3 LEVELS OF SERVICE

The County shall establish and maintain a set level of service for each County potable water facility by providing facilities with sufficient capacity to meet projected service demands.

Policy POT 3.1 Levels of Service Standards

The County shall maintain adopted levels of service standards through the day-to-day activities of the Department of Environmental Services and the implementation of the adopted Capital Improvements Element and the adopted annual budget. <u>Current and proposed level of service standards shall be consistent both in this policy and in the Potable Water Element's Water Supply Facilities Work Plan.</u>

The following levels of service standards are adopted for each individual service area:

(Revised: Amendment 06EX.TXT03.1.06, Ordinance 2007-XX, 11/13/2007)

- A 350 gallons/day/Equivalent Residential Connection. Flow demands for commercial, industrial or other special developments differing from the flow values established by the serving utility shall be established from existing records or by estimated projections, using the best available data.
- B Fire flows in single family residential areas shall provide 600 gpm at a 20 psi residual pressure. Fire flows in commercial, institutional, industrial areas and apartment or multi-unit complexes shall provide 1,250 gpm at a 20 psi residual pressure.
- C Each peak treatment facility capacity shall be maintained at a minimum of two times (2) the permitted capacity.
- D These levels of service shall also be applied for planning purposes to private and city utilities serving unincorporated customers unless a different level of service is authorized by the Florida Department of Environmental Protection or as adopted in a comprehensive plan.
- E The County shall continue to operate in compliance with all rules and requirements of FDEP, as well as all other applicable laws, rules and regulations, including but not limited to peak day, peak hour and service pressure requirements.

Policy POT 3.2 Water **Quality** Master Plan

The County shall update the Water <u>Quality</u> Master Plan every five years. As part of the update, the County shall conduct a level of service review to determine if adjustment of the existing level is necessary based on, but not limited to, historical data and projected demand. The Water Supply Facilities Work Plan (Work Plan) shall be supported by the Water Quality Master Plan. The Work Plan shall be revised and updated as necessary to maintain consistency with the Master Plan.

(Revised: Amendment 06EX.TXT03.1.07, Ordinance 2007-XX, 11/13/2007)

Policy POT 3.3 New and Replacement Equipment

The County shall maintain the established levels of potable water service through the acquisition of new and replacement equipment in accordance with the adopted five year Capital Improvements Element.

Policy POT 3.4 Transmission Lines

The County shall ensure that future transmission lines are sized to adequately meet the projected demands of development according to development phasing needs based



OBJECTIVE POT 4 COORDINATION AND URBAN SPRAWL

The County shall coordinate the extension of lines or increase of facility capacity with adjacent municipal and private facilities and discourage urban sprawl through implementation of the following policies:

Policy POT 4.1 Evaluation of Service Area Expansion

The County shall evaluate the impact on delivering adequate service to residents within the adopted service area as depicted in *Exhibit POT: Water Service Areas* prior to the expansion of a potable water service area outside the adopted service area boundaries. The County shall not expand the service area if the adopted level of service in the existing service area cannot be maintained or if the expansion will encourage urban sprawl.

Policy POT 4.2 Methods of Providing Potable Water Outside of the Adopted Urban Service Area

Outside of the Adopted Urban Service Area as depicted in *Exhibit FLU; Special Area Boundaries*, the County shall:

- A Continue to rely primarily upon individual wells as the method of providing potable water to the residents and other occupants outside the urban services area.
- B Encourage private central systems that exist as of the adoption date of this Plan to continue to provide an adequate level of service to users in their respective service areas, although the County shall discourage them from expanding their service areas.
- C New development outside adopted central service areas shall not be designed nor constructed with central water and/or sewer systems.
- D Public and private central systems may be permitted in the future if it is clearly and convincingly demonstrated by the proponents of the system expansion that a health problem exists in a built but unserved area for which there is no other feasible solution. In such cases, the service area expansion plans will be updated concurrent with an area-wide administrative land use update.

Policy POT 4.3 Existing Package Plants

Existing package plants (i.e., schools, mobile home parks) shall be requested by the County to hook-up to the County system when it becomes available.

Policy POT 4.4 Wholesale Agreements

- The County shall enter into wholesale agreements with municipal and/or private utilities to encourage the most cost effective and efficient provision of water services and to avoid duplication of services during County expansion of capacity or lines when and where economically feasible and supportive of the County's long term water planning strategy.
- Wholesale agreements shall be incorporated as needed into the Support Documents of the Water Supply Facilities Work Plan (Work Plan) and designed to support and further advance the Work Plan.

(Revised: Amendment 06EX.TXT03.1.08, Ordinance 2007-XX, 11/13/2007)

Policy POT 4.5 Extension of Service to New Development

The County shall continue to require new development to fund the cost of extending water lines to serve their development.





OBJECTIVE POT 5 COORDINATION OF POTABLE WATER AND LAND USE PLANNING

The County shall coordinate land use planning with the management of water source and supply plans through the Comprehensive Plan, local water supply initiatives and the St. Johns River Water Management District's Regional Water Supply Plan (DRWSP 2005).

(Added Objective and Policies: Amendment 06EX.TXT03.1.09, Ordinance 2007-XX, 11/13/2007)

Policy POT 5.1 Ten Year Water Supply Facilities Work Plan

The County shall maintain a Water Supply Facilities Work Plan (Work Plan) for at least a ten (10) year planning period addressing water supply facilities necessary to serve existing and future development within the County's water service areas and support other local and regional water supply plans. The Work Plan shall be incorporated wholly into the Potable Water Element of the Comprehensive Plan and be supported by data and analysis contained in separate documents noted in the Work Plan. Other elements of the Comprehensive Plan as noted in the Work Plan shall be amended as necessary to support and be consistent with the Work Plan.

(Added: Amendment 06EX.TXT03.1.10, Ordinance 2007-XX, 11/13/2007)

Policy POT 5.2 Consistency of the Work Plan with the Capital Improvements Element

Capital projects scheduled in the first five years of the ten year Work Plan shall be included in the Capital Improvements Element which is to be financially feasible. This schedule shall be updated annually as necessary to maintain consistency with the capital projects listed in the Work Plan and within 18 months following an update to the District Regional Water Supply Plan and subsequent revision to the Work Plan. (Added: Amendment 06EX.TXT03.1.11, Ordinance 2007-XX, 11/13/2007)

Policy POT 5.3 Coordination with the Seminole County Water Master Plan

The County shall use the Work Plan in conjunction with the County Potable Water Master Plan to prioritize and coordinate the expansion and upgrade of facilities used to withdraw, transmit, treat, store and distribute potable water to meet future needs. (Added: Amendment 06EX.TXT03.1.12, Ordinance 2007-XX, 11/13/2007)

Policy POT 5.4 Coordination of Water and Land Use Planning

The County shall coordinate the Water Supply Facilities Work Plan with the adopted Future Land Use Map and the adopted socio-economic data projections of the Comprehensive Plan. The County shall coordinate the Work Plan with the adopted Future Land Use Map in two ways:

Long range water supply planning to meet future service demand shall be based upon the County's projection of socio-economic data done as part of each seven-year Evaluation and Appraisal Report or more frequently as needed. The projections for population, housing, employment, etc., are based on the vacant, buildable acres of each designated future land use category and therefore provide a reasonable estimate of future service demand by location and shall serve as the starting point upon which the ten-year water demand projections shall be based.





Prior to issuing a building permit, the County shall continue to require a concurrency review finding that the calculated water service demand can be met by available and as yet uncommitted facility capacity and water supply.
 (Added: Amendment 06EX.TXT03.1.13, Ordinance 2007-XX, 11/13/2007)

Policy POT 5.5 Coordination and Consistency with District Regional Water Supply Plan

The County shall coordinate with and be consistent with the St Johns River Water Management District's most current Regional Water Supply Plan (DRWSP) when proposing or amending the ten-year Water Supply Facilities Work Plan (Work Plan). At a minimum, this coordination shall take place within 18 months following an update to the DRWSP, generally done every five (5) years, and be documented in the text of the Work Plan. Where appropriate and feasible, the Work Plan shall include collaborative approaches with other local governments for water supply source use and development and water resource development.

(Added: Amendment 06EX.TXT03.1.14, Ordinance 2007-XX, 11/13/2007

Policy POT 5.6 Coordination with District and Local Water Providers

The County shall coordinate and consider with the St Johns River Water Management District and other local governments on the development of efficient, cost-effective, and technically feasible water supply sources that will supplement future demands, without causing adverse impacts to water quality, wetlands, and aquatic systems. Consideration and coordination efforts made for each major water project shall be noted in the Work Plan. The County shall continue to work with the "Cooperators Group" of the District, County and Cities towards the development and evaluation of implementing a Countywide water supply plan.

(Added: Amendment 06EX.TXT03.1.15, Ordinance 2007-XX, 11/13/2007)

Policy POT 5.7 Maximize Use of Facilities and Supply Sources

The County shall seek to maximize the use of existing potable water facilities, when financially and technically feasible, through the implementation of management techniques that enhance a source of supply, sustain water resources and related natural systems, and/or optimize water supply yield.

(Added: Amendment 06EX.TXT03.1.16, Ordinance 2007-XX, 11/13/2007)

Policy POT 5.8 Assessment of Work Plan with Evaluation and Appraisal Report (EAR)

The County shall assess as part of each EAR:

- The extent to which the local government has considered the DRWSP and implemented a ten year Work Plan for building public, private, and regional water supply facilities, including the development of alternative water supplies, to meet the needs identified tin the Potable Water Element.
- 2. The extent to which the County has been successful in identifying alternative water supply projects, traditional water supply projects, and conservation and reuse programs to meet the water needs identified in the DWSP 2005 or subsequent updates. (Added: Amendment 06EX.TXT03.1.17, Ordinance 2007-XX, 11/13/2007)





Policy POT 5.9 Water Conservation Programs and Practices

Implement and maintain the following conservation water programs and practices that will result in a reduction of potable water demand. A description of each is detailed in the Work Plan in the Potable Water Element:

- 1. Water Conservation Ordinance By 01/01/2008, the County shall adopt an ordinance implementing an irrigation program that:
 - a. Includes the District Model Ordinance recommendations;
 - Exceeds the Model Ordinance by specifying the actual two (2) weekdays to which watering is restricted and also extends the restriction to watering with reclaimed/reuse water;
 - c. Allows Seminole County to levy fines directly through the billing system; and
 - d. Includes language allowing emergency measures to be enforced based on District water shortage orders.
- 2. System Water Audits The County shall continue to aggressively seek to accurately identify water production, transmission, and use in order to maximize system efficiency and identify areas for further savings.
- 3. Public Education The County shall continue the Water Conservation Coordinator's efforts of public education, including compliance with all individual requirements of the County's CUP and the District guidelines relative to education programs.
- 4. Residential Irrigation Audit Program The County shall implement an expanded, formal residential irrigation audit program targeting high water users in the four major service areas for individual household irrigation audits.
- 5. Rate Structure Modification The County shall continue to use the adopted rate resolution, implementing an aggressive, multi-tiered inverse block rate structure for potable and irrigation water.
- 6. Potential Future Conservation Programs Seminole County has identified additional programs for potential future implementation, dependent upon the success of the efforts listed above. A detailed list and description of each program can be found in the County's formal conservation plan now under review by the District (February 2007).

(Added: Amendment 06EX.TXT03.1.18, Ordinance 2007-XX, 11/13/2007)

Policy POT 5.10 Reclaimed Water Programs and Practices

Implement and maintain the following reclaimed water programs and practices that will result in a reduction of potable water demand:

- Reclaimed Ordinance The County shall enforce the adopted ordinance requiring that
 residential development approved by the Board that is within one of the designated
 reclaimed service areas as depicted in Exhibit POT: County Reclaimed Water System
 Areas:
 - a. Install dual irrigation lines for new development in areas currently served or scheduled to be served by reclaimed water;
 - b. Connect existing water services once reclaimed is available;
 - c. Install irrigation meters; and
 - d. Install rain sensors.
- 2. Evaluate of the Reclaimed Water Program as part of each future Evaluation and Appraisal Report.
- 3. Residential Reclaimed Retrofits The County shall complete the five (5) residential reclaimed retrofits listed in the Water Supply Facilities Work Plan per the schedule provided in Support Document #1.



- 4. Reclaimed Augmentation Facility The County shall design and construct a surface water reclaimed augmentation facility at Yankee Lake site per adopted CIP project list. The County shall create and implement a plan to eventually use surface water as the primary back-up source of to augment peak reclaimed water demands.
- 5. Tri-Party Agreement The County shall continue to participate through a tri-party agreement with the Cities of Lake Mary and Sanford in implementing the North Seminole Regional Reclaimed Water And Surface Water Augmentation System Expansion and Optimization Project through the Joint Participation Agreement Between City Of Sanford, City Of Lake Mary, And Seminole County Providing For Reclaimed/Water Alternative Water Supply Distribution Infrastructure (Tri-Party Agreement).
- 6. Eastern Regional Reclaimed Water System The County shall continue to maintain its agreement with the City of Orlando to maintain its reclaimed water allotment from the Iron Bridge Waste Water Treatment Plant for sale to the City of Oviedo and the University of Central Florida and the expansion of reclaimed service to new residential developments in identified reclaimed areas of the Southeast Service Area.

(Added: Amendment 06EX.TXT03.1.19, Ordinance 2007-XX, 11/13/2007)

Policy POT 5.11 Compliance With the Wekiva Parkway and Protection Act

The Work Plan is intended to meet the requirements of the Wekiva Parkway and Protections Act by addressing jurisdictional water facilities necessary to serve existing and new development for which the County is responsible.

(Added: Amendment 06EX.TXT03.1.20, Ordinance 2007-XX, 11/13/2007)

Policy POT 5.12 Concurrency Requirements for Potable Water

Adequate water supplies, and potable water facilities shall be in place and available to serve new development no later than the issuance by the County of a certificate of occupancy or its functional equivalent. Prior to approval of a building permit or its functional equivalent, the County shall consult with the applicable water supplier to determine whether adequate water supplies to serve the new development will be available no later than the anticipated date of issuance by the County of a certificate of occupancy or its functional equivalent. (Added: Amendment 06EX.TXT03.1.21, Ordinance 2007-XX, 11/13/2007)

Policy POT 5.13 Meter Replacement Program

The County shall initiate a meter replacement program by the end of 2008 to ensure the accurate measurement of customer usage. (Added: Amendment 06EX.TXT03.1.22, Ordinance 2007-XX, 11/13/2007)





POTABLE WATER ELEMENT WATER SUPPLY FACILITIES WORK PLAN

INTRODUCTION

The Water Supply Facilities Work Plan (Work Plan) is the County's plan to meet current average daily demands and the anticipated growth in demand for a ten-year planning period. The Work Plan sets out how sufficient water, to meet current and future demands, is to be obtained, treated, and distributed over the planning period and how water conservation practices are to be implemented.

Seminole County Environmental Services Department's potable water system is divided into four (4) main geographical service areas: Northeast, Northwest, Southeast and Southwest. The Northeast Service Area (NESA) and Northwest Service Area (NWSA) are two adjacent service areas, with a potable water interconnect that allows the transfer of water between both service areas, as necessary. The other two service areas, Southeast (SESA) and Southwest (SWSA), are geographically isolated. All four service areas have existing interconnects with adjacent cities or utility companies for emergency service (water can be provided or received). The SWSA also includes six satellite water systems purchased from Florida Water Services in 2004, each having independent treatment facilities, distribution systems, and emergency interconnects with adjacent providers. (See: Exhibit POT: County Potable Water - Service Areas, Treatment Plants, Wells and the same exhibit repeated in the Future Land Use Element, Exhibits section).

Compliance with Chapter 163, F.S. and the 2005 District Water Supply Plan

The Work Plan is intended to address the requirements of Chapter 163, F.S. regarding the development of water supply sources and facility improvements and to assess the delivery of water service by other city and private water providers to unincorporated residents outside the County's areas of service.

Additionally, the Work Plan includes the Yankee Lake Reclaimed Water System Augmentation project selected from the St Johns Water Management District's (District) notice of May 2006 listing water supply development projects identified for the County in the 2005 District Water Supply Plan (DRWSP 2005). The County is now starting the process of implementing Phase 1 of the project, targeted at initially building a 5 MGD reclaimed water augmentation plant. In Phase 2, the project would be expanded to as much as 70 MGD of potable water production depending upon the number of funding partners participating in this regional project. At this time, biweekly meetings are being held with potential regional partners.

The County will also be lending support to Sanford's North Seminole Regional Reclaimed Water and Surface Water Augmentation System Expansion and Optimization project and to continue to maintain a development agreement with the City of Orlando regarding the Eastern Regional Reclaimed Water System.

By selecting a DRWSP 2005 project and supporting other such projects, it is the County's intent to demonstrate "coordination with and consideration of the District regional water supply plan". (See letters of notification and response in Support Document No. 1 – Addendum).

A more complete description of the State's requirements relative to work plans can be found in *Issue CON 3* Ground Water Supply – 2007 Update on Groundwater Water Supply in the Conservation Element and *Issue POT 6 Future Water Supply* and *Issue POT 7 Water Supply Facilities Work Plan* in the Potable Water Element as well as *Policy CON 1.17, Policy IGC 3.3, Policy POT 5.1, 5.5, and 5.11.*

Data and Analysis

This Work Plan is based on data and analysis prepared and compiled in the following support documents. The information provides support for the water demand projections, water supply alternatives, water conservation programs and practices, reuse programs and practices, and improvements to facilities that make up the overall Work Plan. Additionally, objectives and policies from the County's Comprehensive Plan supportive of the Work Plan are cited throughout. In particular, a new Objective was added to the Comprehensive Plan titled *Objective*



<u>POT 5 Coordination of Water and Land Use Management.</u> Under this Objective are thirteen (13) new policies in support of the Work Plan.

Support Document No. 1: "Water Supply Facilities Work Plan", Reiss Environmental, August 2007, provides detailed information on the procedures used for calculation of population and demand projections, and more detailed descriptions of water supply, conservation, and reuse projects and programs included in the Work Plan. The support document also contains copies of both the County's most current reuse ordinance and conservation ordinances.

Support Document No. 1: "Addendum", Seminole County, October 2007 - This document supplements Support Document No. 1 dated August 2006. The document updates or adds to information not included in the original transmittal document and, in particular, provides information regarding the provision of service by city or private water utilities, either directly or indirectly, to unincorporated residents. Each item is discussed in this Work Plan. The Addendum materials will be integrated into the Support Document #1 at the next update.

<u>Support Document No. 2: "Water Treatment Plant Evaluation Summary"</u>, Boyle Engineering Corp, April 2006, provides a detailed inventory and condition assessment of all County-owned water supply facilities, including source wells, treatment facilities, pumping stations, and distribution piping.

Support Document No. 3: "Water Quality Master Plan – Potable Water Section", Boyle Engineering Corp, late-2007, will detail planning and projects related to water facilities – collection, transmission, treatment, storage, pumps, wells, and distribution. Completion of the master plan update is planned for late 2007 with the results being used to program Work Plan capital projects into the 2012-2020 portion of the Work Plan planning period.

WATER SUPPLY FACILITIES WORK PLAN

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The Work Plan incorporates and continues the progressive plan that the County has been implementing over the past 10 years, based on seeking economical and environmentally-sound solutions for water supply and distribution. Adopted Comprehensive Plan policies which supporting the Work Plan are noted in parentheses.

The geographic service area for the Seminole County Work Plan includes the entire unincorporated area of the County. Within this unincorporated area, potable water service is delivered by three major types of utilities: County retail, city wholesale/retail, and private retail. Smaller subdivision providers and private wells serve the remainder of the unincorporated County.

The main components of the Work Plan are the following:

- Water Facility Planning Projections, needs, projects, funding, and concurrency
- II Groundwater Supply and Facilities Improvements Development and optimization of groundwater supplies, treatment and distribution facilities
- III Water Conservation Programs and Practices Details of water conservation efforts
- IV Water Reuse Programs and Practices Expansion of reuse facilities to serve residential areas
- V Alternative Water Supply Projects Evaluation of alternative water sources including surface water for reclaimed augmentation and potable water supply.
- VI Retail and Wholesale Cross-Service Between Water Providers Evaluation of water service to unincorporated areas from other water providers



I Water Facility Planning

A Projected Demands

Planning for provision of water supply service in each of the service areas is based upon projections of the County's future potable water demands by serviced area. Initial input for the water demand projections came from the adopted levels of service, adopted future land use designations and overall projected County population figures found in the Comprehensive Plan. (Support: Policy CIE 3.1 Adopted Level of Service Standards and Schedules of Capital Improvements).

As part of the County's current efforts to apply for and negotiate a new consolidated Consumptive Use Permit (CUP), revised water demands were generated according to projected population increases. A summary of the methodology for projecting future population is presented in Support Document No. 1, as well as the protocols used for the CUP application in converting these population figures into future potable water demands. The results of these efforts have received conceptual approval by the District, and these demands were used as a basis for this Work Plan in place of the projections used by the District in its Water Supply Assessment 2003 to support its District Water Supply Plan 2005. (Support: Policy POT 3.1 and Policy POT 5.4)

Projected demand for the major water use categories prepared by the District for the DWSP 2005 indicate that the demand for public supply will continue to grow significantly through 2025, that domestic self-supply will hold steady, that agriculture/recreational uses will drop by nearly half, and that commercial/industrial uses will remain at their current very low level of less than one percent. (See: Table 3, Seminole County Major Water Use Categories, in the Support Document No. 1 – Addendum).

The Potable Water Element, Exhibits section, Exhibit POT: Projections of Service Area Potable Water Demands/Permitted Groundwater Capacity presents the resulting potable water demands projected for the Seminole County Environmental Services Department's (SCESD's) service areas. This same table under the name of Exhibit CIE: Capacity/Improvements Summary is adopted into the Capital Improvements Element of the Comprehensive Plan. The projected deficits are addressed in Exhibit POT: Projected Water Use Consolidated (Consolidated) which provides the overall projected water uses, including offsets of potable water demand via reuse system expansion and conservation efforts. Note that both these tables have been accepted by the District as the working figures under which the County's application for a global CUP is now being considered. Note that the County continues to use its adopted Level of Service of 350 gpd/Equivalent Residential Unit – an industry standard – for planning purposes. While the current per capita rate used in Consolidated projections is somewhat higher than desired, this is expected to be lowered over time as full impact of the reuse and conservations programs replace and reduce the use of groundwater.

B Potable Water Supplies and Facility Needs

Water supply planning and project programming is accomplished through the County's 20 year water quality master plan, updated every five years, and the County's overall Capital Improvement Program (CIP). The CIP is a list of approved and planned projects covering the next five years and updated annually. Funding sources are identified for each CIP project. (Support: Policy CIE 1.5, Policy CIE 1.12 and Policy POT 5.2)

Based on the potable water demand projections in *Exhibit POT: Projected Water Use Consolidated*, Seminole County is developing detailed plans for the provision of potable water over the next ten years and beyond, including groundwater supply, reuse, conservation, and alternative water supply projects.

Expected completion of the County's Potable Water Master Plan is late 2007. This document will become "Support Document No. 3" and will identify the CIP projects designed to "fill-in" the remaining 2012-2020 planning period of the Work Plan. (Support: Policy POT 3.2 and Policy POT 5.3)



C Work Plan Project Identification

The Work Plan is presented as covering an initial ten-year planning period from 2008 to 2018 plus an additional two years to 2020, the end of the County's adopted long range planning period. Note that the County's major groundwater and reuse/conservation projects will be completed by 2012 and are programmed into both the Work Plan and the five-year Capital Improvements Element (CIE) of 2008 with this amendment. These capital projects are displayed in *Exhibit POT: Major Work Plan Capital Projects* and in the *Exhibit CIE: Five Year Capital Schedule of Improvements – Water Supply Work Plan Projects*. Work Plan capital projects falling into the 2012 to 2020 period fall into two categories:

1 Master Plan Projects – These are projects still being finalized as part of the County's long range Potable Water Master Plan targeted at completion later in 2007. This 20-year planning document will become the Support Document No. 3 of the Water Supply Facilities Work Program and the projects will be adopted into the next amendment of the Work Plan.

2 Alternative Water Supply Projects – These are projects selected from the District's list whose scope and timing is subject to identifying funding partners. Active discussions with interested parties to become funding partners are now underway. Once funding partners are secured and interlocal agreements executed, a schedule of projects will be produced and adopted into the Work Plan and CIE, filling in additional years in the 2012 – 2020 planning period.

D Work Plan Project Funding

On September 25, 2007, the County Board of County Commissioners (County Board) approved a two year budget that included \$182,117,885 dollars to fund the Work Plan projects shown in *Exhibit POT: Major Work Plan Capital Projects*. The dollars are shown in the years when they are available for use. A grey bar indicates the time period over which the projects will be expending their allotted funding if not in the first two years. Funding sources are identified for each CIP project. (Support: Policy CIE 1.5, Policy CIE 1.12 and Policy POT 5.2)

Additionally, a "project schedule" type depiction of the major capital projects is provided in *Exhibit POT: Major Work Plan Project Schedules*. In this exhibit, some projects are shown as having earlier planning phases already completed.

Funding by one or more of the following committed sources will be applied to the listed Work Plan projects: Beginning fund balance (cash), connection fee receipts, State grants for alternative water supply, and outside funding sources to include the Series 2006 Water and Sewer Revenue Bonds, issued December 7, 2006, and a subsequent bond issuance planned for 2009. The State Revolving Funds (SRF) may also be used as a funding source. The Series 2006 Bonds will provide approximately \$165,059,207, funding the majority of the CIP for the initial two years. Total borrowings through the five-year planning horizon are estimated at \$255,467,000. These dollars can be committed under the authority of the County Board or are guaranteed by executed interlocal agreements or contracts and do not rely on public referendum to enable their use. In this manner, the definition of "financial feasibility" is met.

E Concurrency Management

Seminole County will continue to operate a Concurrency Management System (CMS) as required by Chapter 163, F.S., and shall ensure that all development orders, permits and agreements are subject to the adopted CMS standards and provisions and that potable water facilities shall be in place and available to serve new

<u>development no later than the issuance by the County of a certificate of occupancy or its functional equivalent.</u>

Prior to approval of a building permit or its functional equivalent, the County shall consult with the applicable water supplier to determine whether adequate water supplies to serve the new development will be available no later than the anticipated date of issuance by the County of a certificate of occupancy or its functional

equivalent. (Support: Issue FLU 1 Concurrency Management, Policy CIE 3.4, Policy FLU 6.2, Policy IMP 2.5, Policy POT Application to New Development, and Policy POT 5.12).

II Groundwater Supply and Facilities Improvements

Added to the Conservation Element is *Issue CON 3 Ground Water Supply – 2007 Update on Groundwater Water Supply* and noted is the support to the Work Plan provided by the entire *Objective CON 1 Groundwater Protection*. As part of "coordination with and consideration of the DRWSP, *Policy CON 1.1 Groundwater Model/Assessment* was revised to be supportive of the District regional water supply planning process.

Over the term of this work plan, the County will Complete the following projects to maintain and improve the supply of potable groundwater to its users:

- A Review and upgrade the six former Florida Water Services treatment facilities as needed addressing current storage, treatment and transmission capacities and distribution systems. The County is currently considering elimination of up to 5 of the water treatment plants, water service to be provided by interconnects and interlocal agreements for those locations. (CIP No. 00203201 and 00203301)
- B Replace the ground storage water tank at the Hanover Woods WTP. (CIP No. 00203401)
- C Perform any unanticipated water treatment facility improvements and repairs. (CIP No. 00056601)
- D Install Well #3 at the Country Club WTP to replace the lost capacity in the NESA from the conversion of Well #2 at Greenwood Lakes to a monitoring well, (CIP No. 00178301), and construction of a new ground storage tank (CIP No. 00195401).
- E Rehabilitation of the Lake Monroe WTP. (CIP No. 00193301)
- F Perform water quality master planning and treatment plant improvements. (CIP No. 00195701)
- G Perform general potable well improvements (CIP No. 00201501) including:
 - 1 Well #7 at the Southeast Regional WTP.
 - 2 Wells #1 and 2 at the Druid Hills WTP.
 - 3 Wells #2, 4 and 5 at the Heathrow WTP.
- H Perform various improvements at the Markham WTP (CIP No. 00216601 and CIP No. 00216701). Improvements include two wells, a storage tank with aerator and two high service pumps. These improvements are intended to go forward and could serve as backup to Wells #2, 4 and 5 at Heathrow WTP.
- Complete CUP consolidation for 4 main service areas with proposed increase in groundwater as well as a commitment to develop a surface water source by 2013.
- Construct Aquifer Storage and Recovery facilities at the Markham WTP (CIP No. 00200401). Construction of an exploratory well is underway as of January 2007 to determine the feasibility of storage and recovery. The CIP includes design and construction of the facility.



III Water Conservation Programs and Practices

The County has a ten year history of providing reclaimed water to commercial users in certain areas for irrigation use, which has served to lower commercial potable water demands. The County has also consistently participated in water conservation education and infrastructure improvements, with programs implemented by the County's full-time Conservation Coordinator. With regulatory and water supply issues growing in importance, Seminole County sponsored a study of further conservation strategies to determine efficient and cost-effective methods for reducing potable water uses, particularly those which allow for demonstration by measurement of the actual water saved.

Based on an evaluation of water use patterns relative to land use (commercial, single-family, multi-family, etc.) and relative to service areas within the County (Northwest, Northeast, Southwest, Southeast), it was determined that the most effective conservation approach was a combination of continued and focused public education and other compliance-required programs, as well as minimization of current potable water use for irrigation. The significant conservation efforts described below are currently funded through the County's operational budget, unless otherwise noted. The use of reclaimed water to replace potable water is covered in the reuse section of this Work Plan. (Support: Policy CON 1.19)

Over the term of this Work Plan, the County will:

- A Periodically complete system water audits and implement remedial actions when irregularities are found. (Support: Policy POT 5.9.2)
- B Prepare a Conservation Plan under the Sanitary Sewer and Reclaimed Water Master Plan budget (CIP No. 00255201) by 2009 which will set out conservation practices and programs to be applied as appropriate across the County's four service areas and to specific areas as needed. As part of this project, a variety of implementation activities are also planned once the planning is complete. (Support: Policy POT 1.4)
- C Continue the Water Conservation Coordinator's efforts on public education, including compliance with all individual requirements of the County's CUP and District guidelines relative to education programs (Support: Policy POT 5.9.3). Seminole County is currently committed to expenditures of approximately \$100,000 annually to this effort, primarily associated with salaries and conservation program supplies. The program will include, but not be limited to:
 - 1 Televising water conservation public service announcements.
 - 2 Providing water conservation videos to local schools and community organizations.
 - 3 Constructing, maintaining, and publicizing water efficient landscape demonstration projects.
 - 4 Providing water conservation exhibits in public places such as trade shows, festivals, shopping malls, utility offices, and government buildings.
 - 5 Providing/sponsoring water conservation speakers to local schools and community organizations.
 - 6 Providing water conservation articles and/or reports to local news media.
 - 7 Displaying water conservation posters and distributing literature.
 - 8 Providing landscape irrigation audits and irrigation system operating instructions to local small businesses and residents (more information regarding the residential irrigation audit program is provided below).



- 9 Establishing a water audit customer assistance program that addresses both indoor and outdoor water use.
- 10 Developing tools to quantify water savings attributable to the public education program, wherever possible (e.g., recording addresses of low-flow showerhead exchanges, and estimating potential water savings and locations accordingly).



- D Maintain a residential irrigation audit program. (Support: Policy POT 5.9.4). The County has implemented an expanded residential irrigation audit program targeting over 3,000 users in the four major service areas for individual audits. Evaluations suggest with confidence that the County can reduce overall potable water demand by approximately 1.9% through implementation of this program, at a relatively low cost per gallon saved. The County has approved the funding of the first six years of this program, at a level of \$150,000 per year, which will allow for one audit to be performed on each of the 3,000 homes identified for program inclusion.
- E Maintain an aggressive water conservation-promoting rate structure. (Support: Policy POT 5.9.5)
- F Monitor the success of the County's water conservation measures and evaluate one or more of the following additional measures, if needed and appropriate. (Support: Policy POT 5.9.6)
 - 1 Expansion of the small business and residential irrigation audit program, as initial quantification of the program indicates that significant (20%+) water savings for customers undergoing irrigation audits can be realized.
 - 2 Ultra-low flow (ULF) toilet replacement education and incentive (rebate) program.
 - 3 Showerhead retrofit program.
 - 4 Assistance program to larger water users.
 - 5 Ordinance reform, including a proposal to mandate that new water customers verify that ULF toilets and low-flow showerheads be installed prior to initialization of potable water service by the County.
 - 6 Adoption of regulations that override green lawn deed restrictions.
 - 7 Allow development incentives for water efficient developments, such as those that use the Florida Water StarSM program, a point-based, new home certification program, similar to the federal Energy Star® program.
- G Initiate a meter replacement program targeting residential meters by the end of 2008. (CIP 00250201) (Support: Policy POT 5.13)
- H Require water-conserving plumbing devices including those required by the Florida Building Code. (Support: Policy POT 1.5)
- Require Xeriscape (Waterwise) landscape and irrigation practices. (Support: Policy POT 1.5 and Policy CON 1.12)
- J Adopt by January 1, 2008 an irrigation and landscaping ordinance. (Support: Policy POT 5.9.1)
- <u>K Require emergency water conservation measures during water shortage declarations by the District.</u>
 (Support: Policy CON 1.16 and Policy POT 1.6)
- L Maintain the County's well-capping program in conjunction with the Seminole County Soil and Water Conservation District and the District. (Support: Policy CON 1.9 Well Capping Program)

M Source Protection:

- Enforce the County's wellhead protection ordinance. (Support: Policy CON 1.5 Wellfield Protection and Policy FLU 1.11 Wellfield Protection). This policy is enforced through Chapter 55 Wellfield Protection of the County's Land Development Code.
- 2 Expand the wellhead protection program by pursuing interlocal agreements with other entities. (Support: Policy CON 1.6 Intergovernmental Wellfield Protection)





- 3 Protect aquifer recharge areas in general by enforcement of the Aquifer Protection Overlay Zoning classification (Support: Policy CON 1.3 Recharge Area Protection) and in the designated Rural Areas by applying specific development standards. (Support: Policy FLU 11.14 Protection of Natural Resources). Also see Exhibit FLU: FLU Series Cones of Influence)
- 4 Continue evaluation of the use of septic tanks and effluent reuse relative to most effective recharge areas. (Support: Policy CON 1.4 Recharge Area Reuse; Support Document No. 1 Addendum, Map 2 Unincorporated Areas of Septic Service).
- 5 In the County's Evaluation and Appraisal Reports (EAR) include evaluation of the effectiveness of aquifer protection measures, policies and regulations and make revisions as necessary. (Support: Policy CON 1.2 Recharge Area Protection/Conservation Measures, Policy CON 1.3 Recharge Area Protection, and Policy DRG 3.8 Groundwater Recharge)

IV Water Reuse Programs and Practices

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The following details methods by which the use of reuse water will be increased and offset the demand for potable water. (Support: Policy CON 1.19). See Exhibit POT: County Reclaimed Water Service Areas.

Over the term of this Work Plan, the County will:

- A Continue to enforce the County's Reclaimed Ordinance (Ordinance 2006-12) (Support: Policy POT 5.10.1 and Policy POT 1.7) regarding requirement for effluent reuse agreements and ensuring that current and proposed reuse practices are consistent with the CUP and Regional Water Supply Plan
- B Maintain reuse supply to customers in its Northwest and Northeast service areas. (Support: Policy POT 5.10.1)
- C Expand the reuse system to supply existing residential areas in the Northwest Service Area (zone of highest per capita use). Completion of the following projects according to the schedule provided in *Exhibit POT:*Major Work Plan Project Schedules is expected to offset approximately 1.33 MGD of current potable water use for irrigation by 2010.
 - 1 The five phases of residential reuse retrofits are included in CIP project Nos. 00217301, 00217201, 00223001, 00223101, and 00223201. (Support: Policy POT 5.10.3)
 - 2 Improvements to reclaimed water storage and repump capacity include a new storage and repump facility near the Markham WTP. (CIP No. 00217801).
 - 3 Improvements to the distribution network for reclaimed water are planned for 2011 that will add two major reclaimed water mains along Markham Road and on SR 46 linking to the Yankee Lake RWRF entrance. Design, biding, and construction are expected to take approximately 17 months for each.
- D Provide reuse water to future developments in areas of the Northeast, Northwest, and Southeast Service

 Areas shown in Exhibit POT: County Reclaimed Water System Areas. An additional 1.29 MGD of potable
 water is expected to be saved through expansion of the reuse system to these new areas. (Support: Policy
 POT 5.10.5 and 5.10.6)
- E Require mandatory hook-up to reclaimed systems where available, require meters to be installed on new reclaimed water connections, and require installation of rain sensors. (Support: Reclaim Ordinance 2006-12, Support Document No.1 Addendum and Policy POT 5.10.1)



- F Require new developments within existing or future areas of reuse water availability to install dual-lines for future connection to the expanding reuse system within the existing and future reuse connection area as depicted in. Exhibit POT: Northwest/Northeast Reclaimed Water System and Exhibit POT: Southeast Reclaimed Water System. (Support: Policy POT 5.10.1)
- G Maintain the Tri-party agreement with the cities of Sanford and Lake Mary relative to development of a regional reuse system to deliver reclaimed water to use in place of potable water for irrigation. The agreement, as amended in 2001 and 2005, allows for up to 2.75 mgd of reclaimed water to be supplied to the County, and provides for the parties to share the costs of expanding the City of Sanford's WRF reclaimed water supply from 7.3 mgd to 14.6 mgd by augmenting with water from Lake Monroe, and the costs of pumping station necessary to boost the pressure at the interconnection to Seminole County. The project is co-funded by USEPA and the three parties are to match 45% of the costs. The County is providing funding to the City of Sanford for improvements to the existing surface water reuse augmentation facility, and proposed storage facilities, both of which are currently under design through the City's Capital Improvements Program. This project is referred to as the North Seminole Regional Reclaimed Water and Surface Water Augmentation System Expansion and Optimization Project in the District's District Water Supply Plan 2005 and is more fully described in Sanford's February 2007 Water Supply Facilities' Work Plan, Chapter 8. (Support: Policy POT 5.10.5)
- H Construct and put into service by late 2009, the Seminole County Yankee Lake Reclaimed Water System Augmentation Project, a 10 mgd facility for treating raw water from the St. Johns River with an intake located just downstream from Lake Monroe. The project is a listed water supply development project in the District's District Water Supply Plan 2005. (CIP No. 00164301, 00181201, 00181601). (Policy POT 5.10.4)
- Maintain an agreement with the City of Orlando to develop the Eastern Regional Reclaimed Water System to expand the use of reuse water allotted to Seminole County to include new residential development in the Southeast Service area as growth occurs in identified reuse service areas beyond the amounts now provided to the City of Oviedo and the University of Central Florida. (Support: Policy POT 5.10.6)
- J The County currently utilizes 5.0 mgd of its allotted 8.506 mgd (of the over 20 mgd of reclaimed water produced by Iron Bridge Treatment Plant), for contract sale of bulk reuse flow to the City of Oviedo (3 mgd) and the University of Central Florida (2 mgd). The remaining 3.506 mgd of reuse water is available for use in implementing the "Eastern Orange County and Seminole County's Regional Reclaimed Water Reuse Project in the District's District Water Supply Plan 2005 and will be completed in early 2007. The project includes a new 4 million gallon ground storage tank for reuse water, and associated transfer and high-service pumping stations. (CIP No. 00164501).
- K Implement a plan to minimize the use of potable groundwater as an initial back-up source used to augment peak reclaimed demands in the Northwest and Northeast Service Areas by switching entirely to reuse generated from the surface water reuse augmentation facility once on-line in 2009. (Support: Policy POT 5.10.4)
- L As part of completing each Comprehensive Plan Evaluation and Appraisal Report, evaluate the effectiveness of the reuse program and the opportunities for improvement. (Support: Policy CON 1.11, Policy POT 5.8 and Policy POT 5.10.2).



V Alternative Water Supply Projects

Over the term of this Work Plan, the County will:

- A Complete the reuse projects identified in Reuse Facilities and Practices section of this Work Plan including the design and construction of a 10 mgd surface water reuse augmentation facility at the County's Yankee Lake site with an intake located on the St. Johns River just downstream of Lake Monroe. This project is made up of separate study, design, and construction (CIP Nos. 00164301, 00181201, and 00181601. (Support: Policy POT 5.10.4)
- B Design the Yankee Lake intake to allow for additional withdrawal for reuse augmentation and for potential future development of a surface water treatment facility for potable water. Based on current water demand projections, and the potable shortfall shown in Exhibit POT 2, it is expected that the County will develop a surface water source for use by 2017 (see Support Document #1, p. 3-9 and Exhibit POT: Projected Water Use Consolidated which indicates it is on-line in 2017). By 2025, this project will provide approximately 5 MGD of potable water to users in the Northeast and Northwest Service Areas via this new surface water potable treatment facility. (Support: Policy POT 5.10.4)
- Continue to participate with the seven Cities located within the County and the District in the Seminole County "Cooperators Group" towards the development and evaluation of implementing a County-wide water supply plan. (Support: Policy POT 5.6)
- D On June 1, 2007, Seminole County responded to the Districts Water Supply Entity Notification Letter of May 30, 2006. The County's letter served as notification that Seminole County is implementing the Yankee Lake Reclaimed Water System Augmentation project identified in the DWSP 2005 (Project No. 55) in compliance with as required in Chap 163.3177.6c and s. 373.0361(2)(a), F.S. Design of the project is approximately 80% complete with bidding scheduled to start later this summer. The project will provide up to 10 MGD of water from the St. Johns River to augment the County's reclaimed water system. At the point when and if membrane technology is employed, raw and finished water calculations will be included in water production planning.
- E At this time, projects shown below with an "*" are intended to be completed by the County regardless of decisions by the Cooperators Group while the remaining two projects will not be completed by the County, regardless of decisions by the Cooperators Group. (Support: Policy CON 1.18)
 - 1 * Eastern Orange and Seminole Counties Regional Reclaimed Water Reuse Project
 - * North Seminole Regional Reclaimed Water and Surface Water Augmentation System Expansion and Optimization Project
 - 3 * Seminole County Yankee Lake Reclaimed Water System Augmentation Project
 - 4 St. Johns River Near Lake Monroe Water Supply Development Project
 - 5 St. Johns River Near Deland Water Supply Development Project





VI Retail and Wholesale Cross-Service Between Water Providers

Unincorporated residents and businesses obtain potable water from one of four major types of providers: the County itself through County water lines, through city water lines, through for-profit utility water lines, and through water association lines.

Support Document No. 1 – Addendum provides basic information about these systems collected from on-line sources provided by the District. The water providers required to be addressed or noted are presented in the Addendum's List of Public Water Suppliers in Seminole County. Information about the providers is provided in Table 1 - Base Data on Other Public Water Suppliers in Seminole County of the Addendum. The following exhibits display the other utility service areas, treatment plants, wells and the extent of water the line network in the County:

- 1 Exhibit POT: Other Potable Water Service Areas and Treatment Plants
- Exhibit POT: County-wide Existing Water Supply Wells (Note: The original digital well map is no longer available. A new digital copy will be prepared and linked to the appropriate service areas as a part of the County's upcoming EAR based amendments. In general, the majority of wells are closely associated with the water treatment plant and these are mapped within their service areas. For the County, only two added wells are planned and these are in close proximity to their plant Markham Regional Water Treatment Plant CIP 00216601. A new well will be drilled at the Country Club facility as a replacement for an existing well CIP 00195401).
- 3 Exhibit POT: Countywide Water Line Network

For residents and areas provided retail service by County water utilities, the County performs master planning to ensure that current and future demands can be met and matches this planning with the long range development plan of the County.

For residents and areas provided retail service by city utilities, primarily Altamonte Springs and Casselberry, the County relies on each utility to include those unincorporated areas served in their planning for the continued delivery of service. Additionally, any development requests within the unincorporated County needing central water as a condition of development need to provide a letter verifying that the city utility could provide sufficient service to meet the development's water demand and to do so in a manner that meets the County's concurrency management system requirements as described elsewhere in this Work Plan. For residents and areas that provide retail service by private, for-profit, utilities or water associations, the same can be said as for the cities. All three providers serve primarily built-out or very slow growth areas with the exception of Sanford. (Addendum Support: Table 2 - Growth Projections in City Served Unincorporated Areas and Map 1 - Areas of Potable Water Cross-Service in Seminole County)

At this time, the County's Comprehensive Plan contains a policy which directs the County to pursue joint planning agreements (JPA) with each of the cities to address the provision of services and facilities, among other things. In preparing these JPAs, the County can include under this topic methods of sharing data that will ensure adequate planning for the provision of water to those areas served. (Support: Policy FLU 7.2 Joint Planning Agreements). The City of Sanford is unique in that the County has already signed a utility interlocal making the City the designated service provider in a large area surrounding the City. (See Support Document No. 1 – Addendum, Map 1 - Areas of Potable Water Cross-Service in Seminole County, for the extent of the area). A letter of ability to service new development is required and the County's concurrency policies would apply.



The following describes the four methods by which potable water is provided by one water utility – County, city or private – to the service area of another utility or to unincorporated area customers located outside of one of the defined Seminole County potable water utility service areas.

A City Utility Retail Water Service Provided to the Unincorporated Area

- Unincorporated areas (excepting the Sanford/Seminole JPA area) are generally built-out with little expected growth during the planning period. Table 2 in the Support Document No. 1 Addendum, compiles the County's adopted socio-economic data for the key unincorporated traffic analysis zones served by the city utilities of Altamonte Springs and Casselberry as shown in Map 1 of the Addendum. The population change between 2008 and 2020 is projected to be 3%. These long standing service areas should be included in each city's water supply planning and incorporated into their projections of future demand and facility capacity.
- 2 At the point when the County Board of County Commissioners is asked to approve a development within a city or private water utility's service area, a letter is requested from the water provider attesting to and verifying their ability to provide the service required of the development.
- 3 Given that each of the cities is producing a detailed Water Supply Facilities Work Plan, it should be possible to include in future joint planning agreements with the cities a commitment to continue such service and formally account for future water demand in these areas. (Support: Exhibit FLU 7.2 Joint Planning Agreements).
- 4 1993 Sanford/County Joint Planning Agreement (JPA) identifying long range water and wastewater utility service planning areas. The agreement specifies that the area will be service by the City. Map 1 of the Addendum shows the area of unincorporated area subject to service as development occurs. For each development request to the County within the JPA area, the County requests written verification of the City of its ability to serve. (Support: Policy POT 5.12 Concurrency Requirements for Potable Water)
- 5 The City of Sanford also provides potable water on a wholesale basis to the Midway-Caanan Water Association which in turn provides water to users in the Midway Area of the unincorporated County east of the city and north of SR 46.
- B Private Utility Retail Water Service Provided to the Unincorporated Area
 - The service areas of private retail water providers to unincorporated residents are displayed in *Exhibit POT: Other Potable Water Service Areas and Treatment Plants*. While not producing water supply plans, development within these service areas is held to the same standard as the cities a letter of verification that sufficient water is available to serve. Most private areas are built-out and expect very limited growth.
- C County Retail Water Service Provided to City Areas
 - 1 The County provides retail water service to approximately 65 single-family homes within Winter Springs to the built-out Tuscawilla Unit 2 subdivision. Estimated average daily service is 22,750 gpd delivered from the County's Southeast Service Area. The service connections and demand are included in any water facilities and demand planning activities done for this service area by the County (under 0.1 mgd)
- D Water Provided Under Wholesale Agreements Between Providers

In addition to city and private retail service to the unincorporated area, there are a number of wholesale



agreements maintained that are collectively referenced in the County's Intergovernmental Coordination Element's Exhibit IGC: Existing Coordination Mechanisms With Municipalities Within Seminole County under the Subject Area of "Utilities (Water, Reclaimed Water and Sewer) as "various interlocal agreements for wholesale service". These agreements aid in the maximization of facility uses and efficient use of supply sources. (Policy POT 4.4 and Policy POT 5.7).

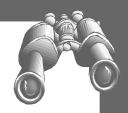


Map 1 of the Addendum displays the major served areas. Note: Smaller areas with flows under 0.1mgd that are noted in this section are not mapped.

- 2004 agreement with the City of Oviedo for the City to provide potable water to the County's Black Hammock area. Seminole County in turn has allocated capacity to exchange with Oviedo as part of this agreement. No significant growth in this area beyond these original plans is expected, and no capital improvements are planned. Capacity to meet this off-set demand has been included and accounted for in all demand projections and plans for the Southeast service area and this should likewise be done by the City of Oviedo. Current ADF is .125MGD. No fixed amount of water is specified.
- 2 2001 agreement with the City of Altamonte Springs for the City to provide potable water the County's Donald Avenue Water System. No significant growth in this area is expected, and no capital improvements are planned. No fixed amount of water is specified. (Under .1 mgd)
- 3 1999 agreement with the City of Casselberry for the City to provide potable water the County's Sunlake/Sunshadow P.U.D. area. No significant growth in this area is expected, and no capital improvements are planned. No fixed amount of water is specified.
- 4 1996 agreement with the City of Oviedo for the County to provide up to 262,500 gpd of potable water the City's Oviedo Crossings DRI and Dovera Community Development District areas. No significant growth in this area beyond the original plans and the original agreement is expected, and no capital improvements are planned.
- 5 1992 agreement with the Sanlando Utilities Corporation to provide potable water to 68 residential units of the County's Wingfield North Subdivision. No significant growth in this area is expected, and no capital improvements are planned. No fixed amount of water is specified. (Under .1 mgd)
- 6 1988 agreement, amended in 1998 with the City of Sanford for the City to provide up to approximately 500,000 gpd of potable water the County's Chase Groves and Chase Property (The Cove) areas. No significant growth in this area is expected beyond original plans, and no capital improvements are planned.
- 7 1988 agreement to Luthern Haven for Seminole County to provide up to .075 mgd of water.

(Added: Amendment 06EX.TXT03.1.23, Ordinance 2007-XX, 11/13/2007) - (WSP WP Final 102007.doc)





EXHIBITS:

- Projections of Service Area Potable Water Demands/
 Permitted Goundwater Capacity (Added: Amendment 06EX.TXT03.1.24, Ordinance 2007-XX, 11/13/2007)
- Projected Water Use Consolidated (Added: Amendment 06EX.TXT03.1.25, Ordinance 2007-XX, 11/13/2007)
- Major Work Plan Project Schedules (Added: Amendment 06EX.TXT03.1.26, Ordinance 2007-XX, 06/12/2007)
- Major Work Plan Capital Projects (Added: Amendment 06EX.TXT03.1.27, Ordinance 2007-XX, 11/13/2007)
- County Reclaimed Water System Areas (Added: Amendment 06EX.TXT03.1.28, Ordinance 2007-XX, 11/13/2007)
- County Potable Water Service Areas, Treatment Plants, and Wells
 (Added: Amendment 06EX.TXT03.1.29,

 Ordinance 2007-XX, 11/13/2007)
- Other Potable Water Service Areas and Treatment Plants (Added: Amendment 06EX.TXT03.1.30, Ordinance 2007-XX, 11/13/2007)
- County-wide Existing Water Supply Wells (Revised: Amendment 06EX.TXT03.1.31, Ordinance 2007-XX, 11/13/2007)
- County-wide Water Line Network (Added: Amendment 06EX.TXT03.1.32, Ordinance 2007-XX, 11/13/2007)







Projections of Service Area Potable Water Demands/Permitted Groundwater Capacity

		2	005	
Water		Permit		
Service Areas	Design Capacity	SJRWMD	Current Demand	Permit
(mgd)	(ADF) (1)	Alloc (2)	(ADF) (3)	Surplus/Deficit
N West (4)	8.376	6.430	5.760	0.670
N East (4)(5)	3.709	3.020	2.280	0.740
S East (6)	13.233	9.154	8.470	0.684
S West	2.560	1.600	1.270	0.330
TOTALS	27.878	20.204	17.780	2.424
Blk Hmk (7)	0.175	NA	0.103	0.072
			010	
Water		Permit	Projected	
Service Areas	Design Capacity	SJRWMD	Demand	Permit
(mgd)	(ADF) (1)	Alloc (2)	(3)	Surplus/Deficit
N West (4)	8.376	8.230	9.480	-1.250
N East (4)(5)	3.709	3.020	2.650	0.370
S East (6)	13.233	9.154	11.390	-2.236
S West	2.560	1.690	1.550	0.140
TOTALS	27.878	22.094	25.070	-2.976
Blk Hmk (7)	0.175	NA	0.129	0.046
			015	
Water		Permit	Projected	
Water Service Areas	Design Capacity	Permit SJRWMD	Projected Demand	Permit
Service Areas (mgd)	(ADF) (1)	Permit SJRWMD Alloc (2)	Projected Demand (3)	Permit Surplus/Deficit
Service Areas (mgd) N West (4)	(ADF) (1) 8.376	Permit SJRWMD Alloc (2) 8.230	Projected Demand (3) 10.860	
Service Areas (mgd) N West (4) N East (4)(5)	(ADF) (1) 8.376 3.709	Permit SJRWMD Alloc (2) 8.230 3.020	Projected Demand (3) 10.860 3.120	Surplus/Deficit -2.630 -0.100
Service Areas (mgd) N West (4) N East (4)(5) S East (6)	(ADF) (1) 8.376 3.709 13.233	Permit SJRWMD Alloc (2) 8.230 3.020 9.154	Projected Demand (3) 10.860 3.120 13.160	Surplus/Deficit -2.630 -0.100 -4.006
Service Areas (mgd) N West (4) N East (4)(5) S East (6) S West	(ADF) (1) 8.376 3.709 13.233 2.560	Permit SJRWMD Alloc (2) 8.230 3.020 9.154 1.370	Projected Demand (3) 10.860 3.120 13.160 1.760	Surplus/Deficit -2.630 -0.100 -4.006 -0.390
Service Areas (mgd) N West (4) N East (4)(5) S East (6) S West TOTALS	(ADF) (1) 8.376 3.709 13.233 2.560 27.878	Permit SJRWMD Alloc (2) 8.230 3.020 9.154	Projected Demand (3) 10.860 3.120 13.160	Surplus/Deficit -2.630 -0.100 -4.006 -0.390 -7.126
Service Areas (mgd) N West (4) N East (4)(5) S East (6) S West	(ADF) (1) 8.376 3.709 13.233 2.560	Permit SJRWMD Alloc (2) 8.230 3.020 9.154 1.370 21.774	Projected Demand (3) 10.860 3.120 13.160 1.760 28.900 0.140	Surplus/Deficit -2.630 -0.100 -4.006 -0.390
Service Areas (mgd) N West (4) N East (4)(5) S East (6) S West TOTALS Blk Hmk (7)	(ADF) (1) 8.376 3.709 13.233 2.560 27.878	Permit SJRWMD Alloc (2) 8.230 3.020 9.154 1.370 21.774 NA	Projected Demand (3) 10.860 3.120 13.160 1.760 28.900 0.140	Surplus/Deficit -2.630 -0.100 -4.006 -0.390 -7.126
Service Areas (mgd) N West (4) N East (4)(5) S East (6) S West TOTALS Blk Hmk (7) Water	(ADF) (1) 8.376 3.709 13.233 2.560 27.878 0.175	Permit SJRWMD Alloc (2) 8.230 3.020 9.154 1.370 21.774 NA Permit	Projected Demand (3) 10.860 3.120 13.160 1.760 28.900 0.140 Projected	Surplus/Deficit -2.630 -0.100 -4.006 -0.390 -7.126
Service Areas (mgd) N West (4) N East (4)(5) S East (6) S West TOTALS Blk Hmk (7) Water Service Areas	(ADF) (1) 8.376 3.709 13.233 2.560 27.878 0.175 Design Capacity	Permit SJRWMD Alloc (2) 8.230 3.020 9.154 1.370 21.774 NA Permit SJRWMD	Projected Demand (3) 10.860 3.120 13.160 28.900 0.140 Projected Demand	Surplus/Deficit -2.630 -0.100 -4.006 -0.390 -7.126 0.035
Service Areas (mgd) N West (4) N East (4)(5) S East (6) S West TOTALS Blk Hmk (7) Water Service Areas (mgd)	(ADF) (1) 8.376 3.709 13.233 2.560 27.878 0.175 Design Capacity (ADF) (1)	Permit SJRWMD Alloc (2) 8.230 3.020 9.154 1.370 21.774 NA Permit SJRWMD Alloc (2)	Projected Demand (3) 10.860 3.120 13.160 1.760 28.900 0.140 Projected Demand (3)	Surplus/Deficit -2.630 -0.100 -4.006 -0.390 -7.126
Service Areas (mgd) N West (4) N East (4)(5) S East (6) S West TOTALS Blk Hmk (7) Water Service Areas (mgd) N West (4)	(ADF) (1) 8.376 3.709 13.233 2.560 27.878 0.175 Design Capacity (ADF) (1) 8.376	Permit SJRWMD Alloc (2) 8.230 3.020 9.154 1.370 21.774 NA Permit SJRWMD Alloc (2) 8.230	Projected Demand (3) 10.860 3.120 13.160 1.760 28.900 0.140 020 Projected Demand (3) 11.960	Surplus/Deficit -2.630 -0.100 -4.006 -0.390 -7.126 0.035 Permit Surplus/Deficit -3.730
Service Areas (mgd) N West (4) N East (4)(5) S East (6) S West TOTALS Blk Hmk (7) Water Service Areas (mgd) N West (4) N East (4)(5)	(ADF) (1) 8.376 3.709 13.233 2.560 27.878 0.175 Design Capacity (ADF) (1) 8.376 3.709	Permit SJRWMD Alloc (2) 8.230 3.020 9.154 1.370 21.774 NA Permit SJRWMD Alloc (2) 8.230 3.020	Projected Demand (3) 10.860 3.120 13.160 1.760 28.900 0.140 Projected Demand (3) 11.960 3.550	Surplus/Deficit
Service Areas (mgd) N West (4) N East (4)(5) S East (6) S West TOTALS Blk Hmk (7) Water Service Areas (mgd) N West (4) N East (4)(5) S East (6)	(ADF) (1) 8.376 3.709 13.233 2.560 27.878 0.175 Design Capacity (ADF) (1) 8.376 3.709 13.233	Permit SJRWMD Alloc (2) 8.230 3.020 9.154 1.370 21.774 NA Permit SJRWMD Alloc (2) 8.230 3.020 9.154	Projected Demand (3) 10.860 3.120 13.160 1.760 28.900 0.140 020 Projected Demand (3) 11.960 3.550 14.430	Surplus/Deficit
Service Areas (mgd) N West (4) N East (4)(5) S East (6) S West TOTALS Blk Hmk (7) Water Service Areas (mgd) N West (4) N East (4)(5)	(ADF) (1) 8.376 3.709 13.233 2.560 27.878 0.175 Design Capacity (ADF) (1) 8.376 3.709	Permit SJRWMD Alloc (2) 8.230 3.020 9.154 1.370 21.774 NA Permit SJRWMD Alloc (2) 8.230 3.020	Projected Demand (3) 10.860 3.120 13.160 1.760 28.900 0.140 Projected Demand (3) 11.960 3.550	Surplus/Deficit
Service Areas (mgd) N West (4) N East (4)(5) S East (6) S West TOTALS Blk Hmk (7) Water Service Areas (mgd) N West (4) N East (4)(5) S East (6)	(ADF) (1) 8.376 3.709 13.233 2.560 27.878 0.175 Design Capacity (ADF) (1) 8.376 3.709 13.233	Permit SJRWMD Alloc (2) 8.230 3.020 9.154 1.370 21.774 NA Permit SJRWMD Alloc (2) 8.230 3.020 9.154	Projected Demand (3) 10.860 3.120 13.160 1.760 28.900 0.140 020 Projected Demand (3) 11.960 3.550 14.430	Surplus/Deficit

1 Physical plant permitted average day capacity.

Revision 2, Jan 25, 2007

- 2 Daily average pumping amount based on SJRWMD CUP permit allocation for the individual year and service area.
- 3 Projected demand is based historical flow information. Amounts have <u>not</u> been reduced due to reflect effects of proposed conservation or reclaimed water usage to offset use of potable water for irrigation. Current demand (2005) is consistent with the County's CUP application, which uses water demands from 9/1/04 8/31/05.
- 4 The Northwest and Northeast service areas are interconnected.
- 5 SJRWMD Northeast CUP expired November 30, 2003. Renewal application submitted to District. Previous allocation shown.
- 6 SJRWMD Southeast CUP expired December 31, 2003. Renewal application submitted to District. Previous allocation shown.
- 7 The Black Hammock Service Area is served through a wholesale contract with the City of Oviedo.
- Note 1: Projected deficits are based on existing facility capacity and current conservation efforts.

Note 2: Six small, built-out private water facilities were absorbed mid-2004. These will be incorporated into the capacity/demand calculations beginning with the 2007 CIE.





Projected Water Use Consolidated

Projected Water Use Consolidated (All Service Areas)

A	В	С	D	E	F	G	Н	Ì	J	K	Ŀ	М	N	0	Р	Q	R	s	T	U
33000	Projected Served	Number	Unadjusted Per Capita Usage	Unadjusted Household	Industrial	Unadjusted Unaccounted	Total Potable Demand	Original Reuse Demand	Total Annual	Water Conservation Factor	Offsets	Reuse Retrofit Offsets	Total Reuse Demand	Increased Population Density Offsets	Adjusted Unaccounted	Total Potable Demand	Adjusted per capita	Total Groundwater	Total Alternative Source Water	200
Year	Population	of Units	(gpcd)	(mgd)	(mgd)	(mgd)	(mgd)	(mgd)	(mgd)	(%)	(mgd)	(mgd)	(mgd)	(mgd)	(mgd)	(mgd)	(gpcd)	(mgd)	(mgd)	Year
2006	105,297	41,293	165.0	17.37	2.20	1.70	21.28	1.48	22.76	0.0	0.00	0.00	1.48	0.00	1.70	21.28	165.0	21.28	0.00	2006
2007	109,212	42,828	166.4	18.17	2.35	1.78	22.30	1.48	23.78	0.4	0.09	0.00	1.51	0.00	1.78	22.20	165.6	22.20	0.00	2007
2008	113,126	44,363	167.7	18.97	2.49	1.87	23.33	1.48	24.81	0.8	0.18	0.50	2.35	0.01	1.81	22.58	161.6	22.58	0.00	2008
2009	117,041	45,898	167.9	19.65	2.62	1.94	24.20	1.48	25.68	1.2	0.26	0.52	2.38	0.00	1.87	23.35	161.2	23.35	0.00	2009
2010	120,956	47,434	168.0	20.32	2.74	2.01	25.07	1.48	26.55	1.5	0.35	1.09	3.65	0.00	1.88	23.50	156.1	23.50	0.00	2010
2011	124,871	48,969	167.9	20.97	2.86	2.07	25.90	1.48	27.38	1.9	0.45	1.11	3.68	0.02	1.93	24.19	155.3	24.19	0.00	2011
2012	128,785	50,504	167.8	21.61	2.98	2.14	26.73	1.48	28.21	2.2	0.54	1.13	3.72	0.04	1.99	24.87	154.5	24.87	0.00	2012
2013	132,700	52,039	167.7	22.25	3.10	2.20	27.56	1.48	29.04	2.3	0.59	1.15	3.76	0.06	2.05	25.60	154.1	25.60	0.00	2013
2014	136,178	53,403	167.6	22.82	3.20	2.26	28.28	1.48	29.76	3.0	0.79	1.17	3.78	0.07	2.09	26.07	152.7	25.60	0.48	2014
2015	139,101	54,549	167.5	23.30	3.29	2.31	28.90	1.48	30.38	3.5	0.94	2.58	5.68	0.06	2.00	25.02	141.8	25.60	-0.58	2015
2016	142,023	55,695	167.5	23.78	3.37	2.36	29.51	1.48	30.99	4.0	1.10	2.63	5.76	0.08	2.03	25.38	140.7	25.60	-0.21	2016
2017	144,946	56,842	167.4	24.27	3.45	2.41	30.12	1.48	31.60	4.0	1.12	2.68	5.85	0.09	2.07	25.90	140.6	25.60	0.30	2017
2018	147,869	57,988	167.4	24.75	3.52	2.46	30.73	1.48	32.21	4.0	1.14	2.73	5.93	0.11	2.11	26.41	140.5	25.60	0.81	2018
2019	150,792	59,134	167.4	25.24	3.60	2.51	31.34	1.48	32.82	4.0	1.16	2.78	6.02	0.13	2.15	26.92	140.4	25.60	1.32	2019
2020	153,714	60,280	167.3	25.72	3.68	2.56	31.95	1.48	33.43	4.0	1.19	2.83	6.10	0.15	2.19	27.43	140.2	25.60	1.83	2020
2021	156,637	61,426	167.4	26.21	3.77	2.61	32.59	1.48	34.07	4.0	1.21	2.87	6.18	0.17	2.24	27.97	140.2	25.60	2.37	2021
2022	159,560	62,572	167.4	26.71	3.86	2.66	33.23	1.48	34.71	4.0	1.23	2.92	6.25	0.19	2.28	28.50	140.1	25.60	2.91	2022
2023	162,483	63,719	167.4	27.20	3.95	2.71	33.87	1.48	35.35	4.0	1.26	2.96	6.33	0.22	2.32	29.04	140.1	25.60	3.45	2023
2024	165,405	64,865	167.4	27.70	4.05	2.76	34.50	1.48	35.98	4.0	1.28	3.01	6.40	0.24	2.37	29.58	140.0	25.60	3.98	2024
2025	168,328	66,011	167.5	28.19	4.14	2.81	35.14	1.48	36.62	4.0	1.31	3.06	6.48	0.26	2.41	30.12	140.0	25.60	4.52	2025

Table 2 Footnotes (Consolidated)

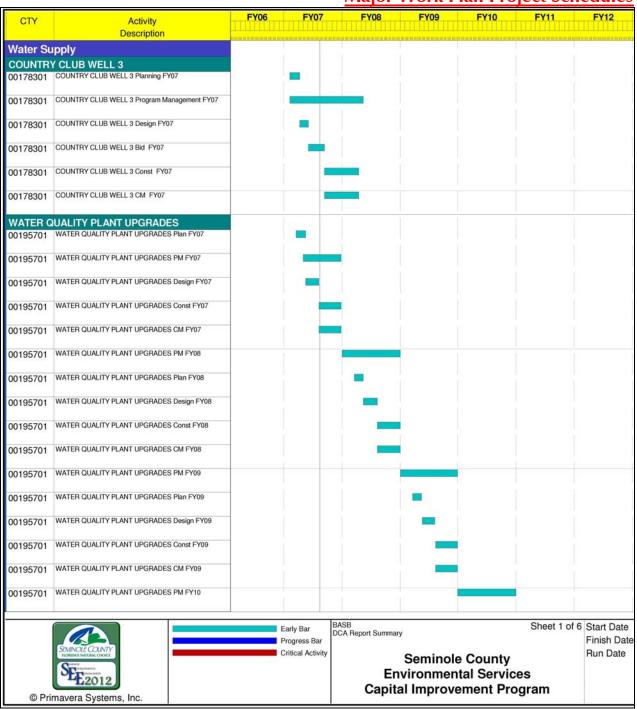
Columns A,U: Year

- Column B: Projected Served (residential) Population (single and multi family) estimated from County Planning Department Data.
- Column C: Number of (residential) Units served estimated by dividing the Projected Served (residential) Population (column A) by the average persons per unit (column A/2.55).
- Column D: Unadjusted per capita (residential) Usage was calculated as the historical five-year average residential flow (2001-2005).
- Column E: Unadjusted household (potable demand). Note that a 6% drought factor was added. Equation: (column B*column D/1000000) + (column B*column D/1000000)*0.06
- Column F: Commercial/industrial. Calculated by applying per employee potable water usage factors by projected employment figures. See RAI 5 Item 4c. For more information.
- Column G: Unadjusted unaccounted for flow, calculated using an 8% flow factor. Equation: [(column E + column F)/0.92] (column E + column F)
- Column H: Total Potable Demand, calculated as the sum of unadjusted potable demand. Equation: column E + column F + column G
- Column I: Original Reclaimed (Demand), calculated as existing reclaimed demand (in 2005).
- Column J: Total Annual, calculated as the sum of potable demand (column H) and existing reclaimed demand (column I).
- Column K: Water Conservation Factor (%), as discussed in Items 7a. And 7b. of the response to RAI 5.
- Column L: Conservation Offsets, calculated by applying the water conservation factor in column K to the sum of unadjusted household and commercial/industrial potable demand: Equation: (column E + column F) * [column K/100]
- Column M: Reuse Retrofit Offsets, calculated as outlined in the response to Item 11 of RAI 5.
- Column N: Total Reclaimed Demand, calculated as outlined in the response to Item 11 of RAI 5. Note that the total reclaimed demand in column N is required to meet the reclaimed offsets listed in column M.
- Column O: Increased Population Density Offsets, calculated by assuming 20% of population growth in RAI 5, in excess of the population figures in RAI 4, uses 80 gpcd, instead of the 5-year average value in column D.
- Column P: Adjusted Unaccounted, calculated by applying an 8% factor to the sum of adjusted household and commercial/industrial potable demand. Equation: [(column E + column F column M column M column O)/0.92] (column E + column F column L -
- Column Q: Total Potable Demand, calculated as the sum of adjusted potable demand. Equation: (column E + column F + column P column M column O); OR (column S + column T)
- Column R: Adjusted (residential) per capita, calculated by dividing Total Potable Demand by the population. Equation: [(column E column L column M column O)/(column B)]*1000000
- Column S: Total Groundwater, calculated as the Total Potable Demand, but never exceeding the value at year 2013 (cell S10)
- Column T: Total Alternative Source Water, calculated as the Total Potable Demand minus the Total Groundwater, starting at year 2014. Equation: (column Q column S)

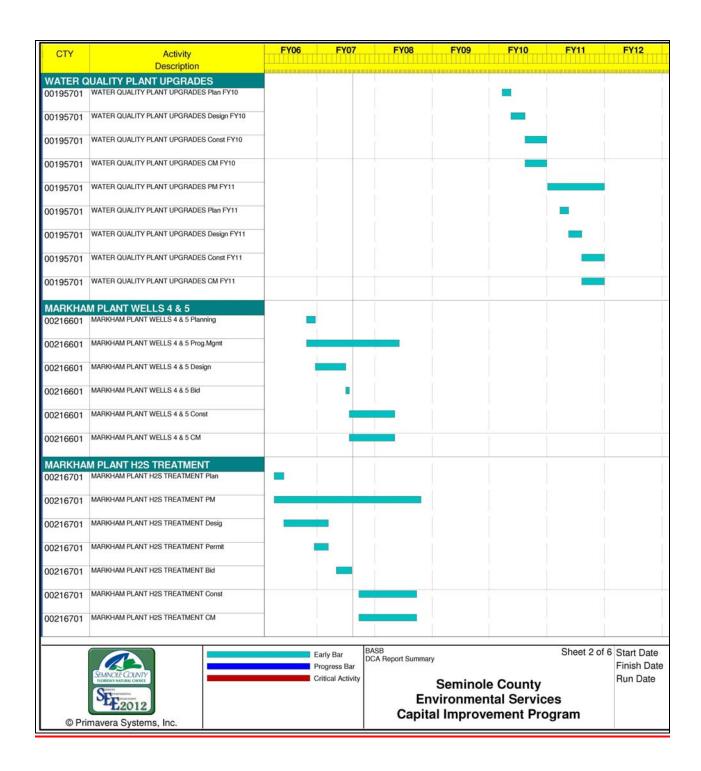


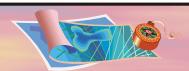


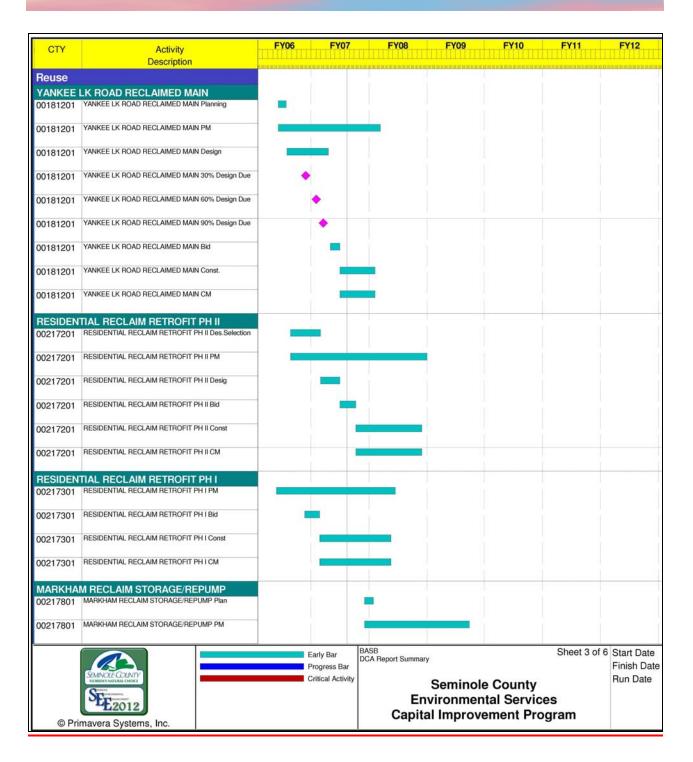
Major Work Plan Project Schedules





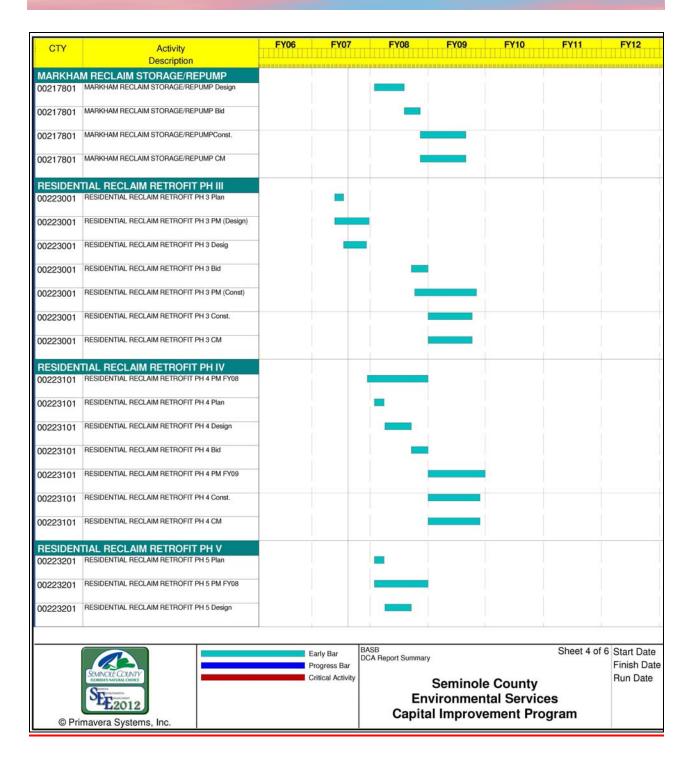






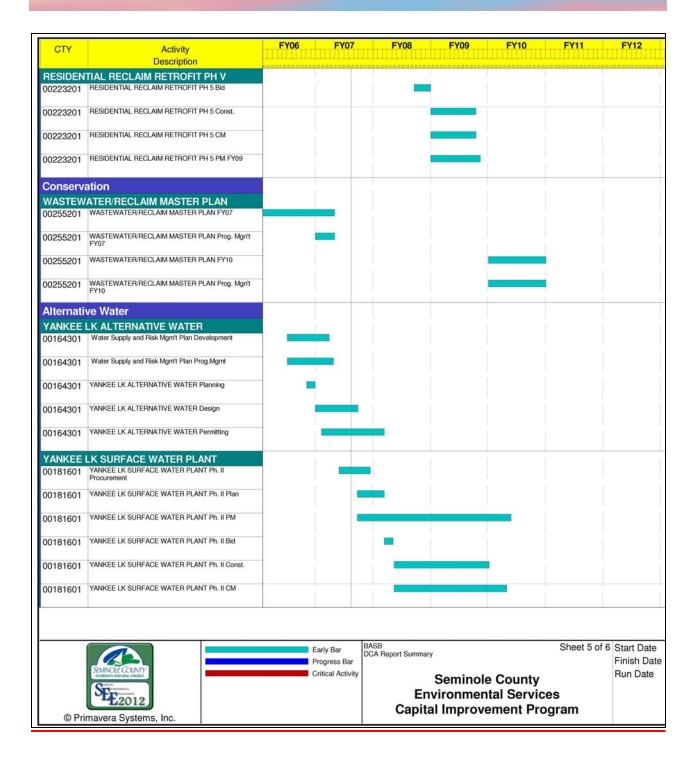




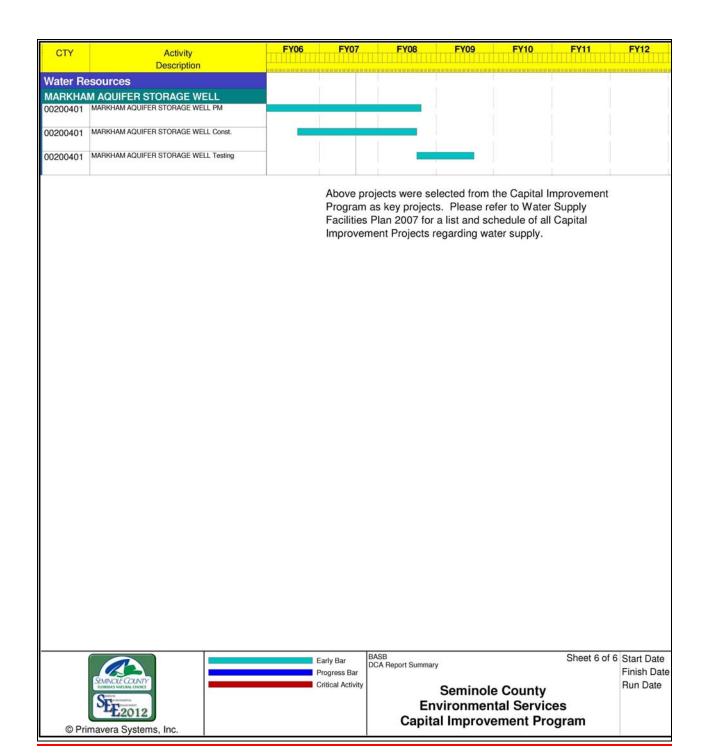


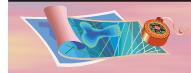






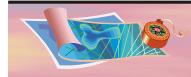






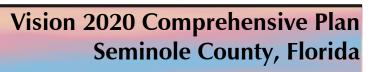
Major Work Plan Capital Projects

					T	T	T	1		·			1		1
Project #	Project Title	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Funding
	TABLE WATER CAPITAL PROJECTS	\$ 240,820 \$	1.953.450	Φ.	0	•									(See Footnote)
00021701	Oversizings & Extensions To oversize and/or extend as necessary, reclaimed water and sewer		, ,		County's Master	r Plan Requirem	ents Design	nd construct	ion reimburse	ments to devi	eloper are via	amendments t	to their utility :	agreements	(See Foothole)
	Projects CIP 000217-01 oversizing/extensions - sewer, and CIP 000														
	the County's Master Plan Requirements.								,,						
	·	<u>. </u>													
00024803	Telemetry & SCADA System Improvements	\$ 329,972 \$			<u> </u>	-	<u> </u>	-	-	<u> </u>			-	<u> </u>	(See Footnote)
	This is an on-going program that supports monitoring and control for	County water plant of	perations. Project	is necessary to	maintain and su	stain the regulat	ory complianc	e levels of the	County's Su	pervisory Cor	itrol and Data	Acquisition of	utility infrastr	ucture	
	performance.														
00056601	Potable Water Treatment Plant Rehabilitation	\$ 787,029 \$	\$ 803,122	\$ -	-	\$ -	-	-	-	-	-	-	-	-	(See Footnote)
	Project scope includes required upgrades to the County's sixteen ex														
	changing hydraulics due to growth and to extend service life and cor					n identified: 1. Co	onvert the exis	sting Greenwo	ood Lakes Hig	h Service Pur	np controls fro	om constant sp	peed to variab	ole speed, and	
	implement hydraulic piping modifications for raw and finished water	mains. 2. Lake Hayes	Water Plant hydra	aulic improveme	ents.										
00004504	Datable Water Distribution Contain Immediate	\$ 1,109,313	\$ 289.400	¢.	T &	I ¢		ı	1	Į.	1	1	1	1	(See Footnote)
00064501	Potable Water Distribution System Improvements Rehabilitation to existing County-wide water distribution systems. O				water nining and	I Φ - I valvinα within s	veteme This	work shall in	lude installati	on of valves	svetem interc	nnections and	d line looping	Project is	(See Foothole)
	necessary to restore/improve hydraulic line capacity in conjunction w														
	Mary/SEMCO/Sanford, Technology Park, Country Club Rd, Lynwood														
	Branch, Oviedo Crossings A, B, C, City of Oviedo, Black Hammock,		_	-		-		, , = ======	,	,	,	., 23.00	,		
	• • • • • • • • • • • • • • • • • • • •					,	•			•		_		•	
	East Lake Drive Potable Water Main	\$ 91,612 \$			<u> </u>	\$ -	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	-	<u> </u>		(See Footnote)
	Design, permit and construct a new 12 inch water main in conjunction	on with the roadway co	nstruction project.	he project is n	ecessary to adju	st the existing w	ater main in c	onjunction wit	h the roadway	/ improvemen	ts, and to exte	end the water r	main to provid	le a looped	
	system to provide for better system pressures.														
00065101	Lake Emma Road Utility Replacement/Upgrade	\$ 2,026,906	-	\$ -	\$ -	\$ -	-	-	-	-	-	-	-	-	(See Footnote)
	Design, permit and construct 12 inch and 10 inch water mains and 8							vered in conj	unction with 00	0665101- Lak	e Emma Rd L	Itility Adjustme	nts - Sewer T	he project is	
	necessary to adjust and upgrade the existing water main and force n	nain to avoid conflicts	with the new road	way constructio	n and to increas	e the hydraulic o	apacities.								
		I						T				т	1	_	(0. 5)
	Potable Water Replacements for Minor Roads Design, permitting and construction of adjustments to existing utilitie	\$ 763,038 \$			rovemente inter	Socian improve	-	-	-	iotod with Du	hlia Warka Mi	nor Poodo Pro	arom This a	roup of	(See Footnote)
	projects are necessary to support various stormwater, traffic and roa	•	•	storniwater impi	rovernents, inter	section improver	nents and side	ewaik improve	ements assoc	iated with Pu	DIIC VVOIKS IVII	noi Roaus Pio	ığıanı. Tilis gi	oup or	
	projects are necessary to support various stormwater, traine and roc	iaway construction pro	JCC13.												
00067201	Monroe Rd (CR 15) Utilities Replacement	\$ 1,073,531		\$ -	\$ -	\$ -	-	-	-	-	-	-	-	-	(See Footnote)
	Design, permit and construct a 4 inch force main and 10 inch water i								CIP 0006720	1 - CR 15 Util	ity Adjustmen	ts - Water, and	d CIP 000672	01 - CR 15	
	Utility Adjustments - Sewer have been combined. The project is nece	essary to adjust the ex	kisting water main	and force main	to avoid conflicts	s during roadway	construction.								
										•				•	
00115701	Chemical Feed Systems Rehabilitation	\$ 647,265		<u> </u>	<u> </u>	-		-	-			-	-	-	(See Footnote)
	Design, permit, and install chemical feed pumps, tanks, and appurte	nances at 11 County \	vvater i reatment i	Plant Sites. FDE	P regulations re	quire disinfection	n for all Drinkli	ng water Sys	tems. System	n returbishmei	nt is needed to	o maintain con	npilance.		
00168801	Southeast Service Area Potable Water Main Ph II	\$ 3,340,372	-	-	\$ -	\$ -	-	-	-	-	-	-	-	-	(See Footnote)
	Construct 9,000 feet of 24 inch potable water transmission main on I) from SR 426 to	SR 434. This p	roject provide	s improved hy	draulics in the	e Southeast s	ervice area. P	roject is neces	ssary to provi	de potable	
	water from Southeast Regional Water Treatment Plant to the area so	erved by Lake Hayes \	Water Treatment F	Plant.											
00470404	Dunnal Dand Datable Water Main Danlessmant	I ¢ 200.050 I d	•	Ι¢	I ¢	Ι¢	F	I	1	ŀ	1		ı	1	(See Feetnete)
00178101	Bunnel Road Potable Water Main Replacement Project scope includes relocation of 2,300 linear feet of 8 inch water	\$ 300,050 \$		1 \$ -	<u>I</u> ⊅ -	project Project	is necessary t	o relocate evi	eting utilities (tue to roadwa	v improvemen	te -	-	-	(See Footnote)
	n rojest scope includes relocation of 2,500 linear feet of 6 inch water	main along buillell K	u anu Lucii Faik /	we in conjuncti	on with roadway	project. Froject	io ricocosaly l	o reiocale exi	omig umines (aue io roduwa	y improvemen	no.			
00178301	Country Club Well #3	\$ 598,988	\$ -	\$ -	S -	S -	<u> </u>	l -	<u> </u>	l .		T -			(See Footnote)
00170001	Design, permit and construct one 1200 gallon per minute potable wa			electrical and co	ntrol systems. T	he project is nee	ded to mainta	in the capacit	y of the plant	to meet curre	nt and future	demand project	tions in the N	lortheast	(300 / 001/010)
	service area.							500000	, р.с						
					T.	1.		1							
	Markham Woods Road Utilities	\$ 188,515		<u> </u>	<u> </u>	\$ -		<u> </u>			-				(See Footnote)
	Design and construct a 12 inch water main on Markham Woods Roa	a from Acre Court to (Greentree Lane ar	na from Heathro	w ⊨iementary S	cnooi to Markha	m Koad. Proje	ct is necessa	ry to complete	a nyaraulic l	oop and impro	ve the potable	e water distrib	ution capacity	
	in the Northwest service area per the approved Master Plan.														



Project #	Project Title	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Funding
00193301	Lake Monroe Water Treatment Plant Rehabilitation	\$ 1,178,012	\$ -	\$ -	\$ -	\$ -	-	-	-	-	-	-	-	-	(See Footnote)
	Rehabilitation of Lake Monroe Water Treatment Plant including grou			d controls. Proje	ct is necessary	because of the	deterioration c	of the existing s	steel water gr	ound storage	and pumping	systems.			
		\$ 330,405	T	\$ -	\$ -	\$ -	-	-	-	-	-	-	-	-	(See Footnote)
	Design and construct water main interconnect with Orange County a	t Bear Lake Woods	Rd. Project is neces	sary to provide	an emergency s	source of potable	e water.								
00104101	Automated Valve Improvements	\$ 88.575	\$ 115.760	¢ _	¢ -	C		I .	_	_	_	_	_	_	(See Footnote)
	Project scope is to design and install automatic valves and metering				ι Ψ I reclaimed mai	<u>ιψ</u> ns Project is ned	ressary to imp	lement improv	ements to sv	stem valves fo	r automation	via the SCAD	A system ena	hled	(OCC / OOLIIOIC)
	metering of flows, and sustain system reliability.	TOT OTHIOGITIOGRAPIO			redamed man	no i roject le rice	occoury to imp	nomone improv	cinomo to dy	otom valveo ic	automation	via tile contb	r oyotom, one	ibiod	
00195401		\$ -	\$ 694,560		\$ -	\$ -	-	-	-	-	-	-	-	-	(See Footnote)
	Design and construct a new ground storage tank and refurbish the e demands.		·		nt. The project i	s necessary to s	supplement ex	kisting storage	capacity with	an additional	storage tank	to meet currei	nt and projecte	ed peak	
		\$ 62,187			\$ -	\$ -		-	-	-	-	-	-	-	(See Footnote)
	Evaluation of primary and secondary water quality characteristics in receive water with quality parameters meeting FDEP regulatory guid	elines.	•		of water syster	n modifications	and additions	to improve wa	ter quality. Pr	oject is neces	sary to ensure	e existing cus	omer base co	ntinues to	
00195701	Potable Water Quality - Treatment Plant Improvements	\$ 1,122,708	\$ 11,576,000		\$ -	\$ -	-	<u> </u>		<u> </u>	<u> </u>	<u> </u>	<u> </u>	-	(See Footnote)
	Design, permit & construct improvements to meet compliance with e compliance with water quality regulatory requirements through Treat						simultaneous	ly improving di	rinking water	aesthetic chai	acteristics. P	roject is neces	ssary to mainta	ain	
	Critical Well Sites/Lift Stations - Emergency Power System	\$ -	\$ 405,160	\$ -	\$ -	\$ -	-	-	-	-	-	-	-	-	(See Footnote)
	Emergency power systems to maintain service during power outages	<u> </u>	Φ.	I o	Ι φ	I (t		_	T	T	ı		1	T	(Can Fastmata)
00201101	Consumptive Use Permit Consolidation	\$ 176,872	\$ -	\$ -	5 -	\$ -	-	-	-	-	-	-	-	-	(See Footnote)
	Permitting activities to consolidate the County's CUPs for the Northw sources of water.	vest, Northeast, Sou	theast and Southwe	st service areas.	. Project is nece	essary to consoli	idate four serv	vice areas and	renew the Co	ounty's CUP to	meet growth	needs with th	e most cost e	ffective	
00201501	Potable Well Improvements	\$ 255,638	\$ 231,520	\$ -	\$ -	\$ -	-	-	-	-	-	-	-	-	(See Footnote)
	Project scope encompasses the 46 existing groundwater production regulatory compliance and water quality criteria for all existing grounds.	dwater wells.			The project will	include Well He	ead Protection	improvements	s, modification	ns and upgrad	es to well. Pro	oject is necess	sary in order to	maintain	
	Security Improvements/Enhancements	\$ 487,797			\$ -	-	<u> </u>	<u> </u>	<u> </u>	-	<u>-</u>	<u> </u>	<u> </u>	-	(See Footnote)
	To provide optimum determent, detection, assessment and response the County's utility infrastructure and ensure public health and safety	•	rnal and external thr	eats to the Cour	nty's utility infras	structure. This o	ongoing projec	ct is phased to	mitigate threa	ats by conseq	uence and pro	obability. Proje	ect is necessa	ry to secure	
00203201	Potable Water Distribution System Upgrade- FL Wtr Aquisition		+ 1- 1-		\$ -	\$ -	-	-	-	-	-	-	-	-	(See Footnote)
	Design, permit and construct distribution system upgrades to Apple with quality parameters meeting the DEP regulatory guidelines and leading to the DEP regulatory guidelines guidel	•	•		Lake Harriet se	rvice areas to br	ring these syst	tems up to Cou	unty standard	s. Project is n	ecessary to e	nsure custom	ers receive po	table water	
00203301	Potable Water Treatment Plant Upgrade - FL Water Aquisition						<u> </u>	-	-	-	-	_	-	-	(See Footnote)
	Design and construct water treatment plant upgrades to Apple Valley parameters meeting the DEP regulatory guidelines and levels of serv			ol Ray Manor, La	ake Brantley, Di	ruid Hills and La	ke Harriet. Pro	oject is necess	ary to ensure	customers co	ontinue to rece	eive potable w	ater with qual	ity	
00203401	Hanover Woods Water Treatment Plant- Ground Storage Tank	\$ -	\$ 187,531	\$ -	\$ -	\$ -	-	-	-	-	-	-	-	-	(See Footnote)
	'Design, permit and construct ground storage tank for Hanover Wate	r Treatment Plant. 'F	Project is necessary	to upgrade exist	ting storage fac	ility to meet pea	k demands for	r existing custo	omer base.			•			,
	Fern Park Water Distribution System Improvements	\$ 264,293		\$ -	\$ -	\$ -	-	-	-	-	-	-	-	-	(See Footnote)
	Project is to design and construct 240 feet of 8-inch water line along Plant. Project is necessary to upgrade the distribution piping in former											addition, the F	Fern Park Wat	er Treatment	
00207801	Orange Boulevard Utilities	\$ 3,417,377	\$ -	\$ -	\$ -	\$ -	-	-	-	-	-	-	-	-	(See Footnote)
	Design, permit and construct 24 inch, 16 inch and 12 inch water mai Utility Adjustments and CIP 00217701 Orange Blvd Utility Adjustmen	n, 24 inch, 16 inch a	nd 8 inch force mair					•		-	•	•		•	







Project #	Project Title	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Funding
	Southwest Area Potable Water Main Replacements	\$ -	\$ 277,824		\$ -	\$ -	-	-	-	-	-	-	-	-	(See Footnote)
	Design permit and construct replacement of 6,500 feet of pipe on Ev levels.	eret St, Jerome Way	r, Timothy St, Caufie	eld St, and Mart	ex Dr and repla	ce with new 8-in	ch water main	This project is	necessary d	ue to deterior	ated infrastrud	cture and the	need to mainta	ain service	
00214701	Rising Sun Boulevard Potable Water Main	\$ 116,225		\$ -	\$ -	\$ -	-	-	-	-	-	-	-	-	(See Footnote)
	Design, permit and construct 1,200 feet of 12-inch water main on Ris	sing Sun Blvd from R	ed Bug Lake Rd to I	La Mesa Ave. F	Project is necess	sary as identified	I in the 2003 U	Itility Master P	lan to improve	e system hydr	aulics.				
	Dodd Road Potable Water Main Phase II	\$ -	\$ 57,880		-	\$ -	-	-	-	-	<u>-</u>	-	-	-	(See Footnote)
	Design, permit and construct a 16 inch water main on Dodd Road fro	om Red Bug Road to	Biscayne Drive and	on Howell Brai	nch Road from I	Dodd Road to Be	ear Gully Road	d The Project is	s required to i	improve syste	m hydraulics	consistent wit	h the Utilities I	Master Plan.	
00216501	Elder Road / Orange Boulevard Potable Water Main	\$ 2,699,810	\$ -	\$ -	\$ -	\$ -	-	-	-	-	-	-	-	-	(See Footnote)
	Design, permit, and construct approximately 5,500 linear feet of 12 in Dolgner. Project delivered in conjunction with CIP 00273301- Elder										of 8 inch potab	le water main	s along Kastn	er Place &	
00216601		\$ 1,713,150		\$ -	\$ -	\$ -	-	-	-	-	-	-	-	-	(See Footnote)
	Design, permit and construct two Floridan Aquifer wells and associal gallons per day to meet projected demands and provide redundancy		rical and control sys	stems. The proje	ect is necessary	to increase the	capacity of Ma	arkham Regio	nal Water Tre	atment Plant	from 10.368 n	nillion gallons	per day to 13.	824 million	
00216701	Markham Water Treatment Plant -Forced Draft Aeration	\$ 2,864,295		\$ -	\$ -	\$ -	-	-	-	-	-	-	-	-	(See Footnote)
	Design, permit and construct forced draft aerators to remove hydrog Environmental Protection regulations for the removal of hydrogen su			em to reduce o	dors, new gene	rator and yard pi	iping, electrica	al and control s	systems. The	Project is nec	essary to com	ply with new	Florida Depar	tment of	
00216901	Long Pond Road / Markham Woods Road Potable Water Main			\$ -	\$ -	\$ -	-	-	-	-	-	-	-	-	(See Footnote)
	Design, Permit and Construct 4,100 linear feet of new 16-inch water	main along Long Por	nd Road from North	west/Northeast	interconnect to	Markham Wood	ls Road. Proje	ct is necessar	y per the 2003	3 Utility Maste	er Plan to com	plete a hydrai	ılic loop.		
00249801	CRA Fern Park Utilities	\$ 136,687	\$ -	\$ -	\$ -	\$ -	-	-	-	-	-	-	-	-	(See Footnote)
	The need for new utilities were identified in the US 17/92 CRA Water Fern Park have been combined. Project is necessary to support the	•	•		•				•				, and CIP 002	49801 - CRA	
00254201	I-4 at 17/92 Ramp B-1 Interchange Utilities Replacement	\$ 290,198		\$ -	\$ -	\$ -	-	-	-	-	-	-	-	-	(See Footnote)
	Project scope entails design, permitting and construction in accordar delivered in conjunction with CIP 00254201 - I4/B1 Ramp US 17-92 will be necessary.														
	TIVE WATER SUPPLY	•		•											(2 -
<u>00164301</u>	Yankee Lake Regional Surface Water Facility Design Prepare 50 percent design package for a regional surface water faci necessary to provide an augmentation supply for the public access r		ankee Lake site to i										nt the County	Project is	(See Footnote)
00181201	Yankee Lake Road/SR 46 Reclaimed Water Transmission Main	\$ 1,242,010	¢ _	¢	[¢ _	T¢ -	T -	_	_					I -	(See Footnote)
	Design, permit and construct 1600 linear feet of 24-inch reclaimed m Facility. Project is necessary to provide capacity to serve the existing	ain from Longwood I							main from the	south side o	f SR 46 north	to Yankee La	ke Water Rec	lamation	(GCC F GOLFIOLE)
00181601	Yankee Lake Regional Surface Water Plant Construction	\$ 42,020,895	\$ -	\$ -	-	T\$ -	T -	_	_	<u> </u>	<u> </u>	-	-	_	(See Footnote)
	Construct a 10 MGD surface Water Treatment Plant to provide an au and existing water demand.			ase components	s sized for a pot	ential increase t	o 45 MGD. Pr	oject is necess	sary to augme	ent alternative	water supplie	s in support o	f Consumptive	e Use Permit	
	D/CONSERVATION PROJECTS														
00164501	Eastern Regional Reclaimed Water System	\$ 1,256,535		\$ -	1\$ -	<u> </u>	<u> </u>	-		-	<u> </u>				(See Footnote)
	Interlocal agreement with City of Orlando for the design, permit and oviedo and UCF. The Project is required to provide reclaimed water	in the Southeast ser	vice area for Semino	ole County cust	omers for whole				at the Iron Bri	age vvastewa	ter i reatment	Plant to serv	e Seminole Co	ounty, City of	
00164601	City Of Oviedo/Seminole County Reclaimed Water System	\$ 210,255		\$ -	Ψ	-	<u> </u>		_	-				-	(See Footnote)
	Interlocal agreement with City of Oviedo to design, permit and construction Lockwood Boulevard. The Project is necessary to provide reclaimed													city limits at	
00182301	Markham Woods Road Reclaimed	\$ 3,786,013		\$ -	-	\$ -			-	-	-	-	-	-	(See Footnote)
	Phase II: Construct a 20-inch reclaimed water main and 12-inch forc service along Markham Woods Rd according to Utilities Master Plan		Woods Rd from Tim	berbrook Dr to	Lake Markham	Rd. and 12-inch	potable water	r main. Project	is necessary	to improve sa	anitary sewer,	potable wate	r, and reclaim	ed water	





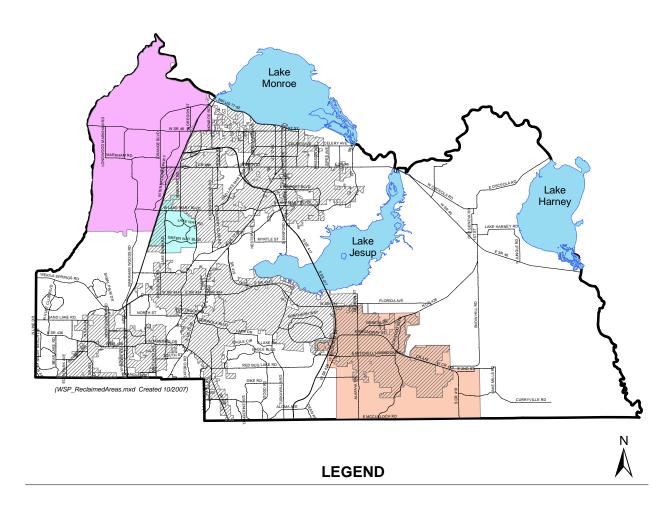
POT Exhibit-8

	Project Title	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Funding
0182901	Greenwood Lakes Reclaimed Water Ground Storage Tank #2	\$ 148,890	\$ -	\$ -	\$ -	\$ -	-	-	-	-	-	-	-	-	(See Footnote
	Design, permit and construct a second 1.75 million gallon reclaimed increasing storage capacity.	water ground stora	ge tank at the Gre	enwood Lakes Ra	pid Infiltration E	Basins facility. Pro	oject is necess	ary to provide	more reliable	reclaimed wa	ater service to	customers du	ring peak usa	age hours by	
00195201	Yankee Lake Water Reclamation Facility Expansion	\$ 15,098,064		- \$	-	\$ -	-	-	-	-	-	-	-	-	(See Footnote)
	Phase I: Expansion to 3.5 MGD based on construction of diffusers, s									construction	of pretreatme	nt upgrade an	d additional e	qualization	
	basin. Project is necessary to provide for regulatory compliance give	n increased flows in	nto the Yankee La	ke Regional Wate	r Reclamation F	acility and requir	red rehabilitation	on of existing	facilities.						
00200901	AAA Drive Reclaimed Water Main	\$ 560,868		\$ -	-	\$ -	-	-	-	-	-	-	-	-	(See Footnote
	Project scope entails design, permitting and installation of 3,200 line Project is necessary to meet specific conditions set forth in the Cou														
				plive use permit is	sued by the St.	John's River wa	ater Managem	ent District.				_			
00217101	Heathrow Boulevard Reclaimed Water Main	\$ 2,829,571		\$ -	\$ -	\$ -	-	- Dhalta Daid	- 	-	-	-	-	-	(See Footnote
	Design, permit and construct a 16-inch reclaimed water main along to provide reclaimed water to several subdivisions within Heathrow						in from Orange	e Biva to Bria	gewater Dr.						
	<u> </u>			T .	T -	/.	1				1		<u> </u>	T	
00217201	Residential Reclaimed Water Main Retrofit Phase II Design, permit and construct reclaimed water distribution system to	\$ 6,417,763		uith reclaimed wat	sor convice for a	n estimated grou	- undwater offeet	- t of 0.62 MCD	-	-	-	-	-	-	(See Footnote
	Project is necessary to comply with the District's Northwest CUP re-						indwater onset	1 01 0.02 MGD	'-						
	, , , , ,	•	, ,	Table Water dema	ia irom ground	······································	_	_							
00217301	Residential Reclaimed Water Main Retrofit Phase I	\$ 942,048		\$ -	\$ -	<u> </u>	-	-	-	-		-	-f 4 00 MOD	Duning string	(See Footnote
	Design, permit and construct reclaimed water distribution system to necessary to comply with the District's Northwest CUP requirement						nden subdivisio	ons with recial	med water sei	vice for an es	stimated groui	ndwater offset	of 1.09 MGD.	. Project is	
00217401	Longwood Markham Road Utility Improvements	\$ 6,876,600		\$ -	\$ -	\$ -	-	-	-	-	-	-	-	-	(See Footnote
	Design, permit and construct a 12 inch water main, 8 inch force main								•		•				
	Longwood/Markham Rd - Reclaimed, and CIP 00217401 Longwood/ water main will provide a major transmission route to the northwest		er have been comb	oined. The project	is necessary to	improve water a	and sewer serv	ice to custom	ers and to sus	tain system p	ressures in tr	e northwest se	ervice area. I	he reclaimed	
00217601	Northwest Reclaimed Water System Augmentation Well	\$ 472,562		\$ -	\$ -	\$ -	-	-	-	-	-	-	-	-	(See Footnote
	Design, permit and construction of augmentation source for reclaimed Project is necessary to augment reclaim water supplies to meet con			•	entation.										
00217801	Markham Reclaimed Water Storage & Repump Facility	\$ 2,361,956	\$ 2,315,20	00 \$ -	-	\$ -	-	_	-	-		-	-		(See Footnote
	Design, permit and construct a 3.0 million gallon storage tank, high s														
	The Project is necessary to provide storage and pumping facilities for	or reclaimed water i	in the Northwest s	ervice area as ide	ntified in the rec	claimed section o	of the County's	Utilities Mast	er Plan.						
00223001	Residential Reclaimed Water Main Retrofit Phase III	\$ 353,317	\$ 7,686,23	30 \$ -	\$ -	-	-	-	-	-	-	-	-	-	(See Footnote
	Design, permit and construct reclaimed water distribution system to the District's Northwest CUP requirements for the County to reduce				arisbrook subdi	visions with recla	aimed water se	rvice for an e	stimated grour	ndwater offset	of 0.34 MGD	Project is i	necessary to o	comply with	
00223101	Residential Reclaimed Water Main Retrofit Phase IV	\$ 382,348	\$ 13,450,92	23 \$ -	-	-	-	-	-	-	-	-	-	-	(See Footnote
	Design, permit and construct reclaimed water distribution system to					d Lakeside subdi	visions, with re	claimed wate	r service for a	n estimated g	roundwater of	fset of 0.33 M	GD. Project	is necessary	
	to comply with District's Northwest CUP requirement for the County	to reduce potable w	ater demand from	groundwater supp	olies.										
00223201	Residential Reclaimed Water Main Retrofit Phase V	\$ -	\$ 10,221,26	62 \$ -	\$ -	\$ -	-	-	-	-	-	-	-	-	(See Footnote
	Design, permit and construct reclaimed water distribution systems t	•	-			n Ridge subdivisi	ons with reclai	med water se	rvice for an es	timated grour	ndwater offset	of 0.33 MGD.	Project is ned	cessary to	
	comply with the District's Northwest CUP requirement for the county	to reduce potable v		· .	plies.										
00243301	Greenwood Lakes RIB Site Potable Water Booster Station	\$ -	\$ 731,52		\$ -	\$ -	-	-	-	-	-	-	-	-	(See Footnote
	Design, permit and construct pumping and chloination system impro	vements for an add	itional 1.75MG pot	table water storage	e tank. Project i	s necessary due	to the populat	ion growth in	the Northwest	area which re	equires existir	ng facilities to b	be expanded.		
00247901	Orange Boulevard Reclaim Main	\$ 2,203,631		\$ -	\$ -	\$ -	-	-	-	-	-	-	-	-	(See Footnote,
	Design, permit and construct 24 inch, 16 inch and 12 inch water mai Utility Adjustments and CIP 00217701 Orange Blvd Utility Adjustmer														
	SOURCE PROJECTS														
WATER RE				•	¢	¢									(See Footnote
	Markham Water Treatment Plant Aquifer Storage & Recovery	\$ 121,075		- \$	- σ	φ -		_		_	_	_	•	-	(000 1 000000)
	Markham Water Treatment Plant Aquifer Storage & Recovery Interlocal agreement with St. Johns River Water Management Distric	ct to construct an ac	quifer storage and	recovery well on a	County easem	nent at the Wilson	n Elementary S	School on Ora	nge Boulevard	d. The project	is necessary	to provide add	itional potable	e water	
00200401	Markham Water Treatment Plant Aquifer Storage & Recovery Interlocal agreement with St. Johns River Water Management District storage capacity for the Northwest Service Area to be used during to	ct to construct an ac mes of high custom	quifer storage and er demand.							d. The project	is necessary	to provide add	itional potable	e water	
00200401 Note:	Markham Water Treatment Plant Aquifer Storage & Recovery Interlocal agreement with St. Johns River Water Management District storage capacity for the Northwest Service Area to be used during to the grey bars to the right of dollar figures represent the time period.	ct to construct an acmes of high customover which that part	quifer storage and er demand.	be completed. In	some cases, pr	ojects began pric	or to 2008 and	will finish bey	ond 2008.						
00200401 Note:	Markham Water Treatment Plant Aquifer Storage & Recovery Interlocal agreement with St. Johns River Water Management District storage capacity for the Northwest Service Area to be used during to	ct to construct an ac mes of high custom over which that part led to the listed Wa	quifer storage and er demand. ticular project is to ter Work Plan CIP	be completed. In projects: Beginnir	some cases, pr ng fund balance	ojects began price (cash), connect	or to 2008 and ion fee receipts	will finish bey s, State grant	ond 2008. s for alternativ	e water suppl	y, and outside	e funding source	ces to include	the Series 20	006 Water and

public referendum to enable their use. In this manner, the definition of "financial feasibility" is met. (CieProjectsWorkDataSet.xls)



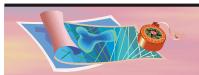
County Reclaimed Water Service Areas



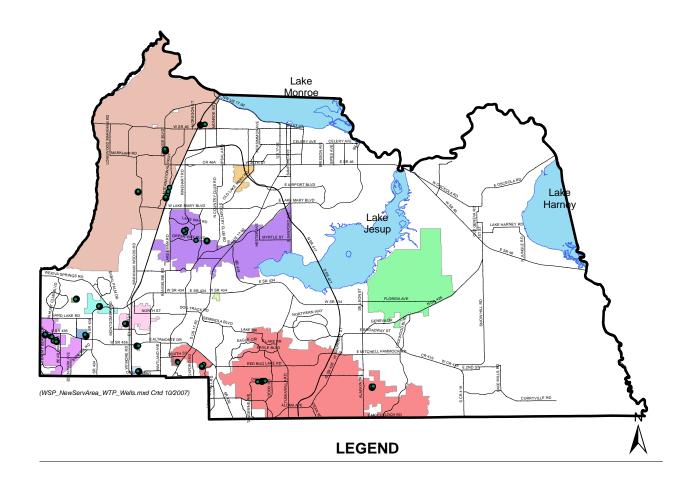
County Reclaimed Water Service Areas

Northeast
Northwest
Southeast
Municipal Area





County Potable Water Service Areas, Treatment Plants, Wells



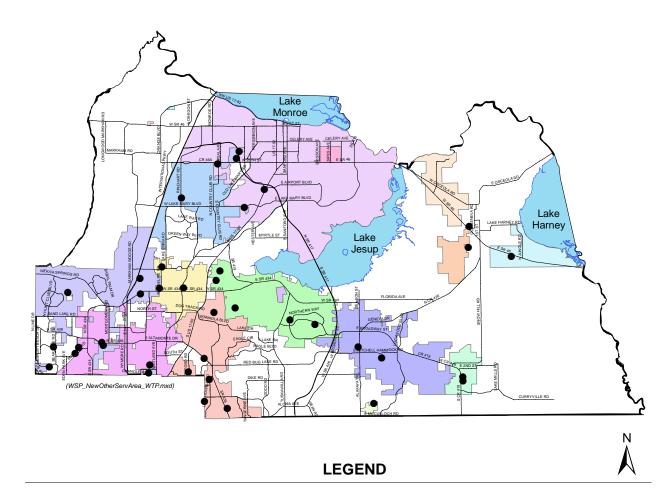


- Seminole County Water Treatment Plants
- Seminole County Water Wells





Other Water Utility Service Areas and Treatment Plants



Non-County Water Treatment Plants
 AQUA UTILITIES

CITY OF ALTAMONTE SPRINGS

CITY OF CASSELBERRY

CITY OF LAKE MARY

PALM VALLEY ASSOC.

SEMINOLE WOODS

SPRING HAMMOCK

TOWN & COUNTRY R.V. RESORT

TUSKAWILLA TRAILS

CITY OF LONGWOOD

CITY OF OVIEDO

CITY OF SANFORD

CITY OF WINTER SPRINGS

LAKE HARNEY WATER ASSOC.

MIDWAY CANAAN UTILITIES

MULLET LAKE WATER ASSOC.

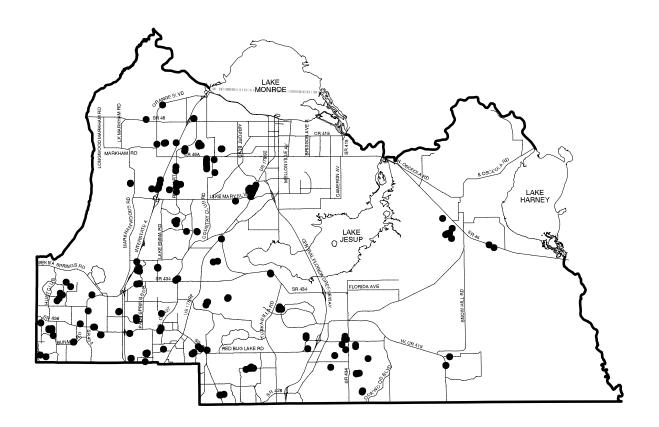
TWELVE OAKS CAMPGROUND

UTILITIES INC.





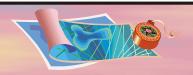
Existing County-wide Water Supply Wells



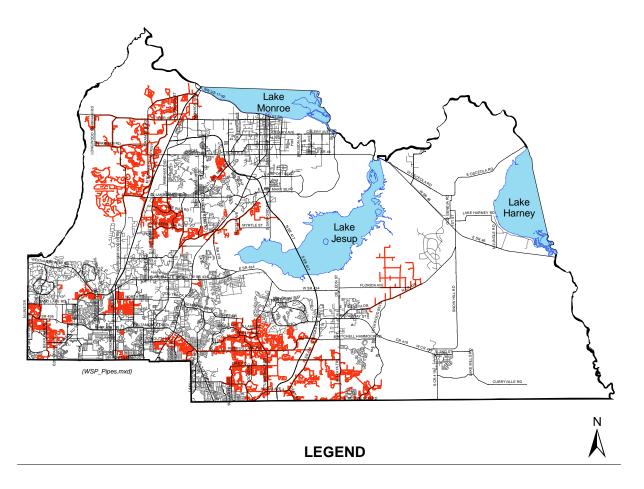


LEGEND

• Existing Water Supply Wells



County-wide Water Line Network

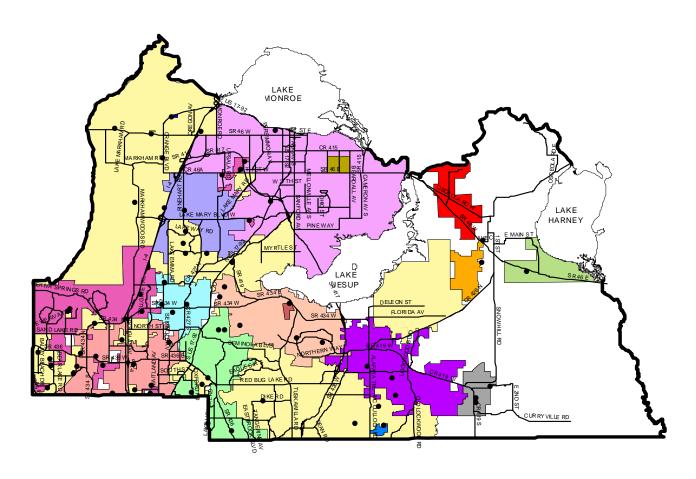


- Seminole County Water Line Network
- County-wide Water Line Network



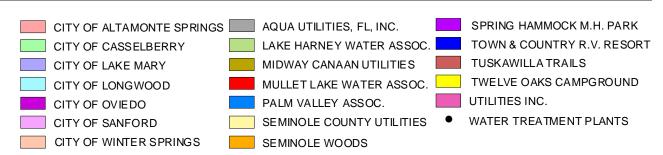


WATER SERVICE AREAS





LEGEND



(Revised: Amendment 04F.TXT03: Ordinance 2004 xx56, 12/14/2004)



ATTACHMENT 2

Amendments to the Capital Improvements Element (06F.TXT03.2)

- Revision to Goals, Objectives and Policies
- Revision to Exhibits

(Note: The amendments have been inserted directly into the appropriate Comprehensive Plan pages in strike and underlined format indicating deletion and addition respectively. Objectives or policies simply being noted as supportive of the Work Plan have their titles underlined.)



CAPITAL IMPROVEMENTS ELEMENT GOALS, OBJECTIVES, AND POLICIES

GOAL

Implement a capital planning program that provides and maintains in a timely, efficient, and fiscally prudent manner public facilities and services which protect the public health, safety and welfare; adequately serve existing and new development; are consistent with Seminole County's future land use plan; achieve and maintain adopted facility levels of service; maintain the existing infrastructure; and minimize public costs.

OBJECTIVE CIE 1 ADOPTION AND UPDATE OF CAPITAL IMPROVEMENTS ELEMENT

The Capital Improvements Element shall be used to guide the programming and implementation of public facility improvements to correct existing deficiencies, repair and replace worn out or obsolete facilities and to accommodate previously approved and new growth in an efficient, cost effective, and timely manner.

Policy CIE 1.1 County Responsibility for Maintaining Level of Service

The Capital Improvements Element shall include an annual schedule of the capital improvements for which Seminole County has fiscal responsibility to maintain the level of service standards adopted in the public facility elements of the Comprehensive Plan. (See *Exhibits CIE: Facility LOS* at rear of element).

Policy CIE 1.2 Annual Review and Update

The Capital Improvements Element shall concentrate on the first five years of capital needs, shall be financially feasible and shall be reviewed and updated annually. (See five year capital schedules of improvements for each facility element in the Exhibits Section at the rear of this element).

Policy CIE 1.3 Florida Department of Transportation Capital Projects

The schedule of capital improvements shall recognize as financially feasible the transportation projects within Seminole County included in the first three years of the adopted five-year FDOT work program.

Policy CIE 1.4 Capital Improvements Element Amendments

A Plan amendment shall be required to eliminate, defer or delay construction of any road or mass transit facility or service which is needed to maintain the adopted level of service standard and which is listed in the five-year schedule of improvements.

Policy CIE 1.5 Capital Improvements Element Consistency With Other Elements

The schedule of capital improvements shall be based upon the future land use and public facility elements of the Comprehensive Plan and shall be consistent with all other elements of this Plan.

Policy CIE 1.6 Coordination With Annual Budgets

Adoption of annual budgets shall include a specific capital budget, which shall implement adequate funding sources and be consistent with the Capital Improvements Element.





- Maintenance or enhancement of services through opportunities to incorporate improved technology and materials; and
- Opportunities for future fiscal efficiencies through such activities as reuse of existing facilities, renewal/rehabilitation to extend useful life, and spreading major periodic renewal/replacement cost burdens over time.

These provisions for renewal/replacement shall be incorporated in the CIE and implemented through annual budget adoptions.

Policy CIE 1.10 Alternative Funding Sources

To ensure optimum strategies for financial feasibility, the County shall review and evaluate available and potential funding sources to ensure a financial strategy exists to adequately fund the five-year Capital Improvements Element. If alternative funding sources are not successfully adopted and implemented on the schedule identified, Seminole County shall either:

- Increase the rates of current revenue sources or implement other available sources such that the schedule of capital improvements is adequately funded in each year; or
- Amend the Future Land Use, Capital Improvements Element and public facility elements including level of service standards and the schedule of capital improvements, as appropriate and necessary, such that internal consistency of the Comprehensive Plan and financial feasibility are maintained.

Policy CIE 1.11 Funding of Public Transportation Services

The Board of County Commissioners shall, at its discretion and in accordance with law, make use of fuel tax revenues and other legal revenue sources for the purpose of funding public transportation capital, operations and maintenance as identified in the Seminole County Comprehensive Plan Capital Improvements Element (CIE). Such revenues may be expended for the public transportation services identified in the CIE including but not limited to capital facilities, operations and maintenance. These services may be provided directly by the County or may be contracted for through public or private service providers. (Added: Amendment 02F.TXT02; Ordinance 2002-55, 12/10/2002)

Policy CIE 1.12 Maintaining Consistency With Water Supply Facilities Work Plan

- A The County shall include in its annual update of the County's financially feasible five (5) year capital improvements project listing the first five (5) years of the ten (10) year Water Supply Facilities Work Plan (Work Plan) to ensure consistency between the Potable Water Element and the Capital Improvements Element.
- B Exhibit CIE: Capacity/Improvements Summary within the CIE Exhibit: Facility Program Potable Water/Sanitary Sewer of the CIE Element shall be updated annually to be consistent with the Work Plan's annually updated table of facility capacity, water demand, and permitted groundwater capacity.
- C Exhibit CIE: Facility LOS All Facilities of the CIE Element shall be updated as necessary to be consistent with existing and proposed levels of service policies adopted in the Potable Water Element and Work Plan.

(Added: Amendment 06EX.TXT03.2.01, Ordinance 2007-XX, 11/13/2007)





OBJECTIVE CIE 3 LOS AND DEVELOPMENT APPROVALS

By adoption and implementation of the Seminole County Comprehensive Plan, land use decisions shall require maintenance of adopted level of service standards and shall be coordinated with the Capital Improvements Element and public facility elements including the adopted schedule of capital improvements.

Policy CIE 3.1 Adopted Level of Service Standards and Schedules of Capital Improvements

Exhibit CIE: Facility LOS - All Facilities shall identify the adopted level of service standards for each public facility. Exhibits CIE: Facility Program for individual elements or Exhibits CIE: Schedule of Improvements for multiple facility programs shall detail the annually adopted five-year financially feasible capital expenditure program supporting the goals, objectives and policies of the Plan.

Policy CIE 3.2 Application to New Development

For the purposes of approving new development subsequent to adoption of this Comprehensive Plan, all adopted public facility level of service standards and schedules of capital improvements, except for Public Safety and Libraries, shall be applied and evaluated in any new development reviews and approvals consistent with policies of the Implementation Element. A final development order shall be issued only if this evaluation finds that the needed public facilities that meet the adopted level of service standards are available or are assured to be available concurrent with the impacts of the development. Preliminary development orders shall only be issued with the condition that no rights to obtain final development orders or development permits, nor any other rights to develop the subject property are granted or implied by the County's approval of the preliminary development order.

Policy CIE 3.3 Five-Year LOS and Impact Assessment

To guide provision of adequate public facilities concurrent with the impacts of development, the schedule of capital improvements for each public facility type shall be accompanied by a summary evaluation of capacity needs and availability for at least the five-year period.

Policy CIE 3.4 Concurrency Management

Seminole County shall continue to operate a concurrency management system pursuant to the Implementation Element which, in conjunction with Policy 3.2 and the other policies of this Capital Improvements Element, will ensure that development orders and permits are issued in a manner that will assure that the necessary public facilities and services will be available at adopted level of service standards concurrent with the impacts of that development.

For potable water, adequate water supplies and potable water facilities shall be in place and available to serve new development no later than the issuance by the County of a certificate of occupancy or its functional equivalent. Prior to approval of a building permit or its functional equivalent, the County shall consult with the applicable water supplier to

determine whether adequate water supplies to serve the new development will be available no later than the anticipated date of issuance by the County of a certificate of occupancy or its functional equivalent.

(Revised: Amendment 06EX.TXT03.2.02, Ordinance 2007-XX, 11/13/2007)





CAPITAL IMPROVEMENTS EXHIBITS

The following exhibits are in support of the Potable Water Element's Water Supply Facilities Work Plan:

- Capacity/Improvements Summary (Replaced: Amendment 06EX.TXT03.2.03, Ordinance 2007-XX, 11/13/2007)
- Five-Year Capital Schedule of Improvements Water Supply Work Plan Projects (Added: Amendment 06EX.TXT03.2.04, Ordinance 2007-XX, 11/13/2007)





Capacity/Improvements Summary

		2	005							
Water		Permit								
Service Areas	Design Capacity	SJRWMD	Current Demand	Permit						
(mgd)	(ADF) (1)	Alloc (2)	(ADF) (3)	Surplus/Deficit						
N West (4)	8.376	6.430	5.760	0.670						
N East (4)(5)	3.709	3.020	2.280	0.740						
S East (6)	13.233	9.154	8.470	0.684						
S West	2.560	1.600	1.270	0.330						
TOTALS	27.878	20.204	17.780	2.424						
Blk Hmk (7)	0.175	NA	0.103	0.072						
		2	010							
Water		Permit	Projected							
Service Areas	Design Capacity	SJRWMD	Demand	Permit						
(mgd)	(ADF) (1)	Alloc (2)	(3)	Surplus/Deficit						
N West (4)	8.376	8.230	9.480	-1.250						
N East (4)(5)	3.709	3.020	2.650	0.370						
S East (6)	13.233	9.154	11.390	-2.236						
S West	2.560	1.690	1.550	0.140						
TOTALS	27.878	22.094	25.070	-2.976						
Blk Hmk (7)	0.175	NA	0.129	0.046						
	Permit Projected									
Water		Permit								
Service Areas	Design Capacity	SJRWMD	Demand	Permit						
ll / =\										
(mgd)	(ADF) (1)	Alloc (2)	(3)	Surplus/Deficit						
N West (4)	(ADF) (1) 8.376	8.230	10.860	-2.630						
N West (4) N East (4)(5)	(ADF) (1) 8.376 3.709	8.230 3.020	10.860 3.120	-2.630 -0.100						
N West (4) N East (4)(5) S East (6)	(ADF) (1) 8.376 3.709 13.233	8.230 3.020 9.154	10.860 3.120 13.160	-2.630 -0.100 -4.006						
N West (4) N East (4)(5) S East (6) S West	(ADF) (1) 8.376 3.709 13.233 2.560	8.230 3.020 9.154 1.370	10.860 3.120 13.160 1.760	-2.630 -0.100 -4.006 -0.390						
N West (4) N East (4)(5) S East (6) S West TOTALS	(ADF) (1) 8.376 3.709 13.233 2.560 27.878	8.230 3.020 9.154 1.370 21.774	10.860 3.120 13.160	-2.630 -0.100 -4.006 -0.390 -7.126						
N West (4) N East (4)(5) S East (6) S West	(ADF) (1) 8.376 3.709 13.233 2.560	8.230 3.020 9.154 1.370 21.774 NA	10.860 3.120 13.160 1.760 28.900 0.140	-2.630 -0.100 -4.006 -0.390						
N West (4) N East (4)(5) S East (6) S West TOTALS Blk Hmk (7)	(ADF) (1) 8.376 3.709 13.233 2.560 27.878	8.230 3.020 9.154 1.370 21.774 NA	10.860 3.120 13.160 1.760 28.900 0.140	-2.630 -0.100 -4.006 -0.390 -7.126						
N West (4) N East (4)(5) S East (6) S West TOTALS Blk Hmk (7) Water	(ADF) (1) 8.376 3.709 13.233 2.560 27.878 0.175	8.230 3.020 9.154 1.370 21.774 NA Permit	10.860 3.120 13.160 1.760 28.900 0.140 Projected	-2.630 -0.100 -4.006 -0.390 -7.126						
N West (4) N East (4)(5) S East (6) S West TOTALS Blk Hmk (7)	(ADF) (1) 8.376 3.709 13.233 2.560 27.878 0.175 Design Capacity	8.230 3.020 9.154 1.370 21.774 NA	10.860 3.120 13.160 1.760 28.900 0.140 020 Projected Demand	-2.630 -0.100 -4.006 -0.390 -7.126 0.035						
N West (4) N East (4)(5) S East (6) S West TOTALS Blk Hmk (7) Water Service Areas (mgd)	(ADF) (1) 8.376 3.709 13.233 2.560 27.878 0.175 Design Capacity (ADF) (1)	8.230 3.020 9.154 1.370 21.774 NA 2 Permit SJRWMD Alloc (2)	10.860 3.120 13.160 1.760 28.900 0.140 020 Projected Demand (3)	-2.630 -0.100 -4.006 -0.390 -7.126 0.035 Permit Surplus/Deficit						
N West (4) N East (4)(5) S East (6) S West TOTALS Blk Hmk (7) Water Service Areas (mgd) N West (4)	(ADF) (1) 8.376 3.709 13.233 2.560 27.878 0.175 Design Capacity (ADF) (1) 8.376	8.230 3.020 9.154 1.370 21.774 NA 2 Permit SJRWMD Alloc (2) 8.230	10.860 3.120 13.160 1.760 28.900 0.140 020 Projected Demand (3)	-2.630 -0.100 -4.006 -0.390 -7.126 0.035 Permit Surplus/Deficit -3.730						
N West (4) N East (4)(5) S East (6) S West TOTALS Blk Hmk (7) Water Service Areas (mgd) N West (4) N East (4)(5)	(ADF) (1) 8.376 3.709 13.233 2.560 27.878 0.175 Design Capacity (ADF) (1) 8.376 3.709	8.230 3.020 9.154 1.370 21.774 NA Permit SJRWMD Alloc (2) 8.230 3.020	10.860 3.120 13.160 1.760 28.900 0.140 020 Projected Demand (3) 11.960 3.550	-2.630 -0.100 -4.006 -0.390 -7.126 0.035 Permit Surplus/Deficit -3.730 -0.530						
N West (4) N East (4)(5) S East (6) S West TOTALS Blk Hmk (7) Water Service Areas (mgd) N West (4) N East (4)(5) S East (6)	(ADF) (1) 8.376 3.709 13.233 2.560 27.878 0.175 Design Capacity (ADF) (1) 8.376 3.709 13.233	8.230 3.020 9.154 1.370 21.774 NA Permit SJRWMD Alloc (2) 8.230 3.020 9.154	10.860 3.120 13.160 1.760 28.900 0.140 020 Projected Demand (3) 11.960 3.550 14.430	-2.630 -0.100 -4.006 -0.390 -7.126 0.035 Permit Surplus/Deficit -3.730 -0.530 -5.276						
N West (4) N East (4)(5) S East (6) S West TOTALS Blk Hmk (7) Water Service Areas (mgd) N West (4) N East (4)(5)	(ADF) (1) 8.376 3.709 13.233 2.560 27.878 0.175 Design Capacity (ADF) (1) 8.376 3.709 13.233 2.560	8.230 3.020 9.154 1.370 21.774 NA 2 Permit SJRWMD Alloc (2) 8.230 3.020 9.154 1.370	10.860 3.120 13.160 1.760 28.900 0.140 020 Projected Demand (3) 11.960 3.550 14.430 2.010	-2.630 -0.100 -4.006 -0.390 -7.126 0.035 Permit Surplus/Deficit -3.730 -0.530						
N West (4) N East (4)(5) S East (6) S West TOTALS Blk Hmk (7) Water Service Areas (mgd) N West (4) N East (4)(5) S East (6)	(ADF) (1) 8.376 3.709 13.233 2.560 27.878 0.175 Design Capacity (ADF) (1) 8.376 3.709 13.233	8.230 3.020 9.154 1.370 21.774 NA Permit SJRWMD Alloc (2) 8.230 3.020 9.154	10.860 3.120 13.160 1.760 28.900 0.140 020 Projected Demand (3) 11.960 3.550 14.430	-2.630 -0.100 -4.006 -0.390 -7.126 0.035 Permit Surplus/Deficit -3.730 -0.530 -5.276						

¹ Physical plant permitted average day capacity.

Revision 2, Jan 25, 2007

- 2 Daily average pumping amount based on SJRWMD CUP permit allocation for the individual year and service area.
- 3 Projected demand is based historical flow information. Amounts have <u>not</u> been reduced due to reflect effects of proposed conservation or reclaimed water usage to offset use of potable water for irrigation. Current demand (2005) is consistent with the County's CUP application, which uses water demands from 9/1/04 8/31/05.
- 4 The Northwest and Northeast service areas are interconnected.
- 5 SJRWMD Northeast CUP expired November 30, 2003. Renewal application submitted to District. Previous allocation shown.
- 6 SJRWMD Southeast CUP expired December 31, 2003. Renewal application submitted to District. Previous allocation shown.
- 7 The Black Hammock Service Area is served through a wholesale contract with the City of Oviedo.
- Note 1: Projected deficits are based on existing facility capacity and current conservation efforts.

Note 2: Six small, built-out private water facilities were absorbed mid-2004. These will be incorporated into the capacity/demand calculations beginning with the 2007 CIE.





Five Year Capital Schedule of Improvements Water Supply Work Plan Projects

Project #	<u>Project Title</u>	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012
00021701	Oversizings & Extensions	\$ 240,820	\$ 1,953,450	-	-	-
00024803	Telemetry & SCADA System Improvements	\$ 329,972	\$ 156,276	-	-	-
00056601	Potable Water Treatment Plant Rehabilitation	\$ 787,029	\$ 803,122	-	-	-
00064501	Potable Water Distribution System Improvements	\$ 1,109,313	\$ 289,400	-	-	-
00064606	East Lake Drive Potable Water Main	\$ 91,612	\$ -	-	-	-
00065101	Lake Emma Road Utility Replacement/Upgrade	\$ 2,026,906	\$ -	-	-	-
00065201	Potable Water Replacements for Minor Roads	\$ 763,038	\$ 578,800	-	-	-
00067201	Monroe Rd (CR 15) Utilities Replacement	\$ 1,073,531	\$ -	-	-	-
00115701	Chemical Feed Systems Rehabilitation	\$ 647,265	\$ -	-	-	-
00168801	Southeast Service Area Potable Water Main Ph II	\$ 3,340,372	\$ -	-	-	-
00178101	Bunnel Road Potable Water Main Replacement	\$ 300,050	\$ -	-	-	-
00178301	Country Club Well #3	\$ 598,988	\$ -	-	-	-
00193101	Markham Woods Road Utilities	\$ 188,515	\$ -	-	-	-
00193301	Lake Monroe Water Treatment Plant Rehabilitation	\$ 1,178,012	\$ -	-	-	-
00193601	Bear Lake Woods Road Potable Water Main Interconn	\$ 330,405	\$ -	-	-	-
00194101	Automated Valve Improvements	\$ 88,575	\$ 115,760	-	-	-
00195401	Country Club Water Treatment Plant- Ground Storage	\$ -	\$ 694,560	-	-	-
00195501	Potable Water Quality - Distribution System Improven	\$ 62,187	\$ 5,788,000	-	-	-
00195701	Potable Water Quality - Treatment Plant Improvement	\$ 1,122,708	\$ 11,576,000	-	-	-
00200501	Critical Well Sites/Lift Stations - Emergency Power Syst	\$ -	\$ 405,160	-	-	-
00201101	Consumptive Use Permit Consolidation	\$ 176,872	\$ -	-	-	-
00201501	Potable Well Improvements	\$ 255,638	\$ 231,520	-	-	-
00203101	Security Improvements/Enhancements	\$ 487,797	\$ 131,520	-	-	-
00203201	Potable Water Distribution System Upgrade- FL Wtr A	\$ 1,939,285	\$ 2,877,107	-	-	-
00203301	Potable Water Treatment Plant Upgrade - FL Water Ad	\$ 1,058,219	\$ 1,874,187	-	-	-
00203401	Hanover Woods Water Treatment Plant- Ground Stora	\$ -	\$ 187,531	-	-	-
00203801	Fern Park Water Distribution System Improvements	\$ 264,293	\$ -	-	-	-
00207801	Orange Boulevard Utilities	\$ 3,417,377	\$ -	-	-	-
00212901	Southwest Area Potable Water Main Replacements	\$ -	\$ 277,824	-	-	-
00214701	Rising Sun Boulevard Potable Water Main	\$ 116,225	\$ -	-	-	-





Project #	Project Title	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012
00214801	Dodd Road Potable Water Main Phase II	\$ -	\$ 57,880	-	-	-
00216501	Elder Road / Orange Boulevard Potable Water Main	\$ 2,699,810	\$ -	-	-	-
00216601	Markham Regional Water Treatment Plant Improveme	\$ 1,713,150	\$ -	-	-	-
00216701	Markham Water Treatment Plant -Forced Draft Aeratic	\$ 2,864,295	\$ -	-	-	-
00216901	Long Pond Road / Markham Woods Road Potable Wa	\$ 750,448	\$ -	-	-	-
00249801	CRA Fern Park Utilities	\$ 136,687	\$ -	-	-	-
00254201	I-4 at 17/92 Ramp B-1 Interchange Utilities Replaceme	\$ 290,198	\$ -	-	-	-
00164301	Yankee Lake Regional Surface Water Facility Design	\$ 1,980,660	\$ -	-	-	-
00181201	Yankee Lake Road/SR 46 Reclaimed Water Transmissi	\$ 1,242,010	\$ -	-	-	-
00181601	Yankee Lake Regional Surface Water Plant Constructic	\$ 42,020,895	\$ -	-	-	-
00164501	Eastern Regional Reclaimed Water System	\$ 1,256,535	\$ -	-	-	-
00164601	City Of Oviedo/Seminole County Reclaimed Water Sy	\$ 210,255	\$ -	-	-	-
00182301	Markham Woods Road Reclaimed	\$ 3,786,013	\$ -	-	-	-
00182901	Greenwood Lakes Reclaimed Water Ground Storage 1	\$ 148,890	\$ -	-	-	-
00195201	Yankee Lake Water Reclamation Facility Expansion	\$ 15,098,064	\$ -	-	-	-
00200901	AAA Drive Reclaimed Water Main	\$ 560,868	\$ -	-	-	-
00217101	Heathrow Boulevard Reclaimed Water Main	\$ 2,829,571	\$ -	-	-	-
00217201	Residential Reclaimed Water Main Retrofit Phase II	\$ 6,417,763	\$ -	-	-	-
00217301	Residential Reclaimed Water Main Retrofit Phase I	\$ 942,048	\$ -	-	-	-
00217401	Longwood Markham Road Utility Improvements	\$ 6,876,600	\$ -	-	-	-
00217601	Northwest Reclaimed Water System Augmentation We	\$ 472,562	\$ -	-	-	-
00217801	Markham Reclaimed Water Storage & Repump Facility	\$ 2,361,956	\$ 2,315,200	-	-	-
00223001	Residential Reclaimed Water Main Retrofit Phase III	\$ 353,317	\$ 7,686,230	-	-	-
00223101	Residential Reclaimed Water Main Retrofit Phase IV	\$ 382,348	\$ 13,450,923	-	-	-
00223201	Residential Reclaimed Water Main Retrofit Phase V	\$ -	\$ 10,221,262	-	-	-
00243301	Greenwood Lakes RIB Site Potable Water Booster Stat	\$ -	\$ 731,520	-	-	-
00247901	Orange Boulevard Reclaim Main	\$ 2,203,631	\$ -	-	-	-
00200401	Markham Water Treatment Plant Aquifer Storage $\&~R\varepsilon$	\$ 121,075	\$ -	-	-	-
(CieProjects	WorkDataSet.xls)					



ATTACHMENT 3

Amendments to the Conservation Element (06F.TXT03.3)

- Revision to Issues and Concerns
- Revision to Goals, Objectives and Policies

(Note: The amendments have been inserted directly into the appropriate Comprehensive Plan pages in strike and underlined format indicating deletion and addition respectively. Objectives or policies simply being noted as supportive of the Work Plan have their titles underlined.)



Issue CON 3 Ground Water Supply

Both the quantity and quality of available potable water supplies is an increasing concern as Seminole County continues at a high rate of growth.

In 1986 Seminole County undertook a Ground Water Supply Study to assess the availability and quality of potable water supplies. The study includes a Countywide (including portions of Orange County) model of the Floridan Aquifer and evaluated; existing and future water demands, critical water supply areas; salt-water intrusion and future wellfield locations. The groundwater study final report was issued in August 1991. This report estimated that the County is currently overdrafting more potable water than is being recharge. The study reports that the County will not be able to meet projected water demands without substantial conservation programs. A task force of County, municipal and private water supply agencies was created to assess study results and develop recommended water conservation programs, and recommend further study needs. Upon completion of the Ground Water model a study will be conducted to identify wellfield protection zones surrounding public well fields, which are depicted in Exhibit FLU: Existing Water Supply Wells. A wellfield protection ordinance has been adopted to regulate and develop performance standards for uses within protection zones, which may impact groundwater quality. Since that time, the St. Johns River Water Management District has completed a lengthy study process of the water supply issues of the entire St. Johns River basin, of which Seminole County is a part. Seminole County has been designated as priority water caution area as a result of this study process, known as Water 2020. This study indicated that the Floridan Aquifer, our primary source of groundwater is scheduled to significantly decrease in volume during the next planning horizon and it identified alternatives for water supply to offset these decreases, most notably, surface water. There are multiple issues related to establishment of a surface water supply system, including siting of facilities, costs, and minimum flows and levels, to name a few. Seminole County recently (2000) partnered with the St. Johns River Water Management District to initiate a feasibility study of surface water opportunities within the middle basin and is currently providing staff representatives on several key advisory groups relative to the entire water supply planning process. Seminole County should maintain an active role in this process and play a major role as a facilitator of interests with the various stakeholders.

2007 Update on Groundwater Water Supply

For the last 15 years, the SJRWMD's water supply planning and assessment investigations have documented that the rate of withdrawal of groundwater in certain areas of the SJRWMD is approaching the maximum rate that can be sustained without causing unacceptable adverse impacts to the water resources and related natural systems. Water supply planning results to date show that at some locations, withdrawal rates will likely approach or reach sustainable limits in the foreseeable future, well within the current 20-year planning horizon.

The 2005 District Water Supply Plan (DWSP 2005) [also known as the Regional Water Supply Plan, (RWSP)] addresses current and future water use and traditional and alternative water sources and water conservation required to meet 2025 water supply needs while sustaining water quality and protecting wetland and aquatic systems. The DWSP 2005 is designed to meet the requirements of the water supply planning provisions of Section 373, Florida Statutes (F.S.), and is based on a planning horizon extending through 2025. (The above text for this section was excerpted from: Technical Publication SJ2006-2, District Water Supply Plan, 2005).



The County is currently in the process of creating a Water Supply Facilities Work Plan (Work Plan) based on the County's future service needs and which will be consistent with and coordinated with the DWSP 2005. The Work Plan can be found in the Potable Water Element of the Comprehensive Plan.

(Revised: Amendment 06EX.TXT03.3.01, Ordinance 2007-XX, 11/13/2007)

Issue CON 4 Air quality

Air quality is an issue requiring increased attention as Seminole County continues to grow. It may become necessary to evaluate the feasibility of establishing an air quality-monitoring program and to review and amend existing regulations.

Air quality in Seminole County is currently monitored by either the Florida Department of Environmental Protection or required as part of major development (DRI) approval. The County itself does not have an air quality monitoring program as Seminole County has no major point source generators and auto traffic historically has not been congested enough to warrant monitoring. However, anticipated future traffic increases may require monitoring.





CONSERVATION ELEMENT GOALS, OBJECTIVES AND POLICIES

GOAL

Preserve, properly manage and, where possible, enhance the quantity, quality and function of Seminole County's natural resources for existing and future generations; to include, but not be limited to the following natural resources: air, surface waters, groundwater supplies, soils/minerals, wetlands, native habitat and wildlife, floodplain, endangered, threatened and species of special concern, open spaces, aquifer recharge areas, and historic and archaeological resources.

OBJECTIVE CON 1 GROUNDWATER PROTECTION - (ENTIRE OBJECTIVE IS NOTED AS APPLICABLE)

<u>The County shall continue to make use of new and By 2005, build upon existing studies as the basis for to establishing a programs, practices and policies to that protect both the quantity and quality of groundwater resources and recharge areas.</u>

Policy CON 1.1 Groundwater Model/Assessment

The County shall work with the St. Johns River Water Management District, USGS, Department of Environmental Protection, and interested parties to evaluate its long range water conservation plan as part of the Water 2020-SJRWMD regional water supply planning process, including participation in working groups and advisory groups on supply planning, minimum flows and levels, and other aspects of the process, including facilitation of input from stakeholder groups.

(Revised: Amendment 06EX.TXT03.3.02, Ordinance 2007-XX, 11/13/2007)

Policy CON 1.2 Recharge Area Protection/Conservation Measures

The County shall evaluate its groundwater conservation measures and policies for regulation of water usage, reduction of land use densities in critical areas, water use restrictions and irrigation alternatives as part of each Comprehensive Plan Evaluation and Appraisal Report (EAR).

Policy CON 1.3 Recharge Area Protection

The County shall evaluate its aquifer recharge overlay zoning classification which sets alternative design criteria and standards to protect the functions of most effective aquifer recharge areas as part of each Comprehensive Plan Evaluation and Appraisal Report (EAR).

Policy CON 1.4 Recharge Area Reuse

The County shall continue to evaluate the use of septic systems and effluent reuse systems within most effective recharge areas and determine any long term negative impacts on groundwater quality and, if appropriate, adopt and develop additional regulations governing their use.



Policy CON 1.5 Wellfield Protection

The County shall continue to monitor and abide bymonitor—Federal and State regulations to support establishment of wellfield zones of protection beyond those already established and shall consider enacting into the land development code, additional protection and programs as warranted by changes in Federal and State policy. (Revised: Amendment 06EX.TXT03.3.03, Ordinance 2007-XX, 11/13/2007)



Policy CON 1.6 Intergovernmental Wellfield Protection

The County shall pursue agreements with municipalities and private water utilities for development and implementation of the Wellfield Protection Program.

Policy CON 1.7 Underground Tank Program

The County shall continue to implement and administer an underground storage tank program coordinated with and consistent with requirements of the Department of Environmental Regulation and other appropriate agencies to ensure groundwater resources are protected.

Policy CON 1.8 Underground Tank Regulations

The County shall, by 2005, review existing regulations and, if appropriate, develop County standards governing the refurbishment and replacement of underground tanks.

Policy CON 1.9 Wellcapping Program

The County shall continue to coordinate with the Soil Conservation Service and the St. Johns River Water Management District with regard to the capping of County owned free flowing wells and the funding of a joint program for capping of private wells.

Policy CON 1.10 Geneva Lens (Bubble) Protection

The County shall continue to assess the water supply limitations of the Geneva lens (bubble) and establish appropriate land use densities and measures to protect its critical recharge functions. The Geneva lens, depicted in *Exhibit FLU: Resource Protection Areas*, should be assessed in conjunction with the St. Johns River Water Management District study of the Geneva Lens.

Policy CON 1.11 Effluent Reuse

The County shall evaluate its expanded effluent reuse program as part of each Comprehensive Plan Evaluation and Appraisal Report (EAR). The program shall, at a minimum, evaluate the following:

- A Implementing expanded <u>effluent_takeback_dual-line_systems</u> for County operated wastewater facilities in an economically and environmentally sound manner;
- B Requiring new development to install <u>effluent takebackdual</u>—lines at the time of development where reuse programs are programmed or exist. This includes the identification of service areas where reuse may be applied and development of a phased implementation program;
- C Implementing existing sewer agreement takeback provisions;
- D Mechanisms to transport and dispose of reuse water within the most effective recharge areas;
- E Incentives for encouraging reuse systems;
- F Reuse programs may be appropriate; and (Revised: Amendment 06EX.TXT03.3.04, Ordinance 2007-XX, 11/13/2007)





Policy CON 1.12 Xeriscape Regulation

The County shall continue to enforce and evaluate its Xeriscape regulations which, at a minimum, sets standards for the use of native and drought tolerant species, removal of exotics, vegetative clearing and efficient irrigation to maximize conservation of water resources. The evaluation process shall consider the existing arbor and landscaping requirements of the Land Development Code requirements with special attention given to the DEP's prohibited plant list and the Florida Exotic Pest Plant Council's Category 1 and 2 lists

Policy CON 1.13 Safe Withdrawal Rates

The County shall coordinate with the St. Johns River Water Management District and surrounding jurisdictions to determine safe withdrawal rates and appropriate land use intensities to ensure an adequate water supply for existing and future needs and shall seek cooperation with the District on continued development of a water budget model.

Policy CON 1.14 Private Well Withdrawal

The County shall cooperate with the St. Johns River Water Management District to monitor the impacts of private well withdrawals on the Floridan Aquifer.

Policy CON 1.15 Minimize Water Withdrawal/Transport

The County shall minimize the withdrawal or transport of water to future developments which would adversely impact existing well production.

Policy CON 1.16 Emergency Water Conservation

The County shall continue to utilize, as necessary, the Emergency Water Conservation ordinance to enable the County to limit water usage by methods that may include, but are not limited to, citations with fines in order to enforce restrictions and surcharges for excessive consumption and use methods as are otherwise authorized by law. The ordinance shall at a minimum be consistent with the St. Johns River Water Management District's Emergency Water Conservation requirements.

Policy CON 1.17 Ten-Year Water Supply Facilities Work Plan Water Supply Plan

- A The County shall assess projected water needs and sources for at least a ten-year planning period as part of creating and maintaining a Water Supply Facilities Work Plan (Work Plan) within the Potable Water Element. Capital projects planned during the first five years of the Work Plan shall also be shown in the Capital Improvements Element.
- B The Work Plan shall address each major type of water supply project groundwater use optimization, conservation, reuse, and development of alternative water supply sources and water resources. For each project type, a detailed description of the project schedule, major activities and capital projects shall be provided and updated as necessary.

(Added: Amendment 06EX.TXT03.3.05, Ordinance 2007-XX, 11/13/2007)

Policy CON 1.18 Coordination with Regional Water Supply Plan

The Work Plan shall be updated within 18 months following an update to the District Regional Water Supply Plan. The County shall coordinate with the St Johns River Water Management District's most recent water supply plan when proposing or amending the ten-year Water Supply Facilities Work Plan (Work Plan). This coordination shall be documented in the text of the Work Plan with each amendment. Where appropriate





and feasible, the Work Plan shall include collaborative approaches with other local governments for water supply source use and development, and water resource development.

(Added: Amendment 06EX.TXT03.3.06, Ordinance 2007-XX, 11/13/2007)

Policy CON 1.19 Articulation of Water Conservation and Reuse Programs and Practices

Water conservation and reuse programs and practices that are part of the Seminole County Water Supply Facilities Work Plan (Work Plan) are detailed in Potable Water Element Policy POT 5.9 Water Conservation Programs and Practices and Policy POT 5.10 Reuse Water Programs and Practices.

(Added: Amendment 06EX.TXT03.3.07, Ordinance 2007-XX, 11/13/2007)



ATTACHMENT 4

Amendments to the Drainage Element (Notation Only)

• Notation of Applicable Policy

(Note: The amendments have been inserted directly into the appropriate Comprehensive Plan pages in strike and underlined format indicating deletion and addition respectively. Objectives or policies simply being noted as supportive of the Work Plan have their titles underlined.)



Policy DRG 3.7 Education Program/Brochure

The County shall continue its commitment to its public education program, supporting all appropriate videos, brochures, and other means of providing education in the following instructional areas: the causes and potential for flooding; the importance of natural conditions and vegetation to water quality maintenance; the importance of keeping drainage ways unobstructed; available County information such as Flood Insurance Rate Maps; County and State Code requirements; and ways to maintain water quality of lakes, conveyances and retention ponds. Brochures for public dissemination shall continue to be developed.

Policy DRG 3.8 Groundwater Recharge

The County shall continue to evaluate its protection of recharge areas with each Evaluation and Appraisal Reporting cycle and amend regulations as necessary to ensure that natural recharge of groundwater from rainfall is not decreased.



ATTACHMENT 5

Amendments to the Future Land Use Element (06F.TXT03.4)

- Revision to Issues and Concerns
- Revision to Goals, Objectives and Policies

(Note: The amendments have been inserted directly into the appropriate Comprehensive Plan pages in strike and underlined format indicating deletion and addition respectively. Objectives or policies simply being noted as supportive of the Work Plan have their titles underlined.)



FUTURE LAND USE ELEMENT ISSUES AND CONCERNS

Issue FLU 1 Concurrency Management

Section 163.3180(2)(a)Rule 9J-5.006(3)(c)3, Florida Administrative Code (FAC), requires that sanitary sewer, solid waste, drainage, adequate water supplies and potable water facilities and services at established level of service standards shall be in place and available to serve new development no later than the issuance by the County of a certificate of occupancy or its functional equivalent, and that, prior to approval of a building permit or its functional equivalent, the County shall consult with the applicable water supplier to determine whether adequate water supplies to serve the new development will be are available no later than the anticipated date of issuance by the County of a certificate of occupancy or its functional equivalent.

Parks and recreation facilities to serve new development shall be in place or under actual construction no later than 1 year after issuance by the County of a certificate of occupancy or its functional equivalent; however, acreage for such facilities shall be dedicated or acquired by the County prior to issuance of a certificate of occupancy or its functional equivalent, or funds in the amount of the developer's fair share shall be committed no later than the County's approval to commence construction.

Transportation facilities needed to serve new development shall be in place or under actual construction within 3 years after the County approves a building permit or its functional equivalent that results in traffic generation.concurrent with the impacts of development, or that development orders and development permits are conditioned on the availability of facilities and services.

The <u>Seminole County Comprehensive Plan</u> (the "Plan") future land use designations were developed after a review of long range facility and service plans. The County's Concurrency Management System (CMS) is intended to serve the long term interests of the citizens of Seminole County by implementing a managed growth perspective that monitors the capacity of important concurrency public facilities and services and maintains the high quality of life that the citizens of Seminole County now enjoy. The CMS includes specific procedures and criteria to ensure that level of service standards adopted in the Plan will be achieved or exceeded. The CMS evaluates final development orders to ensure that the adopted levels of service standards for transportation, potable water, sanitary sewer, solid waste, mass transit, stormwater drainage, and recreation are met. Currently, impact fees are collected for roads, fire and rescue systems, libraries, and schools.

(Revised: Amendment 06EX.TXT03.04.01, Ordinance 2007-XX, 11/13/2007)

Issue FLU 2 Mixed Use and Higher Intensity Planned Development (HIP) Standards

Rule 9J-5.006(2)(c)1, FAC, requires all land use map designations to have allowable uses and intensity ranges to project growth and facility and service needs. Rule 9J-5.006(3)(c)5,(4)(c), FAC, encourages policies for the implementation of mixed use classifications, if locally desired.

The Exhibit FLU: Future Land Use and Exhibit FLU: Future Land Use Designations and Allowable Zoning Classifications defines types, densities and intensities and allowable zoning classifications for all conventional land uses in the County. The Mixed Development,





- 3 The County shall continue to enforce Land Development Code regulations to ensure that future land development and public improvement activities limit and mitigate disruption to or damage of sites determined to be significant historical resources, both structural and archaeological. Land Development Code provisions shall be based on the guidelines and criteria listed in this policy and, at a minimum, consider criteria and procedures for protecting, reporting and evaluating the on-site discovery of artifacts. Mitigation, incentives, disincentives and long term protection guidelines for historically significant sites shall also be addressed.
- B Guidelines and Criteria For Preservation and Protection of Historic Resources
 The criteria for evaluating historic resources as significant shall include, but not be limited to, the following adapted for the "Criteria For Listing" of the National Register Of Historical Places:
 - 1 That the resource be associated with events that have made a significant contribution to the broad patterns of history; or
 - 2 That the resource be associated with the lives of persons significant in the past; or
 - 3 That the resource embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction (e.g., historic district); or
 - 4 That the resource has yielded, or may be likely to yield, information important in prehistory or history.

Guidelines for evaluation and assessment of historical resources shall be based on but not limited to the Secretary of the Department of Interior's Guidelines for Architectural and Engineering Documentation and the Historic Preservation Compliance Review Program of the Florida Department of State, Division of Historical Resources, in particular Chapter 4, Standards for Conducting, Reporting, and Reviewing Archaeological and Historic Site Assessment Survey Activities.

Policy FLU 1.10 Water Quality and Drainage Control

The County shall continue to require water quality and drainage control for all new subdivisions and site plans adjacent to water bodies to prevent unnecessary shoreline disruption and maintain water quality through existing Land Development Code provisions which requires, at a minimum:

- A A permit for all water quality and drainage control activities in waters and wetlands; and
- B Restoration of disturbed areas to their natural state.

Policy FLU 1.11 Wellfield Protection

FLU-16

The County shall provide protection for areas surrounding public water supply wellfields through the regulatory framework of the United States Environmental Protection Agency, the Florida Department of Environmental Protection, the Florida Department of Health and the St Johns River Water Management District. The applicable rules and regulations of these agencies are contained in the County's Wellfield Protection Ordinance, Chapter 55 of the Land Development Code of Seminole County.

FUTURE LAND USE 11fluelmwsp.docfluelm.doc - Last saved: 10/10/078/11/043/3/04



OBJECTIVE FLU 6 PUBLIC FACILITIES AND SERVICES

The County shall require that all development be consistent with the approved Capital Improvements Element or facility and service plans in order to discourage urban sprawl, meet adopted level of service standards and thereby minimize attendant public costs through the implementation of the following policies:

Policy FLU 6.1 Development Orders, Permits and Agreements

The County shall ensure that all development orders, permits and agreements are consistent with the adopted level of service standards and provisions of the Capital Improvements Element and the appropriate facility element as well as all other provisions of this Plan.

Policy FLU 6.2 Concurrency Requirements

The County shall ensure that all development orders, permits and agreements are subject to the adopted Concurrency Management System standards and provisions and that the County willto ensure the availability of both that public facilityies capacity and services water supply capacity sufficient needed to serve the development are available at at the adopted level of service consistent with the Implementation Element of this Plan.

The County shall ensure that all development orders, permits and agreements are subject to the adopted Concurrency Management System standards and provisions and that potable water facilities shall be in place and available to serve new development no later than the issuance by the local government of a certificate of occupancy or its functional equivalent. Prior to approval of a building permit or its functional equivalent, the local government shall consult with the applicable water supplier to determine whether adequate water supplies to serve the new development will be available no later than the anticipated date of issuance by the local government of a certificate of occupancy or its functional equivalent.

(Revised: Amendment 06EX.TXT03.4.02, Ordinance 2007-XX, 11/13/2007)

Policy FLU 6.3 Infrastructure and Phasing Requirements

The County shall require that all development provide services and facilities or phase the development as a condition of approval if development needs precede adopted service and facility plans and Capital Improvements Program and adopted levels of service can be maintained.

Policy FLU 6.4 Priority for Water and Sewer Service

The County shall evaluate the impact on delivering adequate service to residents within the established service area prior to the expansion of a potable water or sewer service area outside the adopted service area boundaries. The County will not expand a service area if the adopted level of service cannot be maintained.

Policy FLU 6.5 Private Investment Above Land Development Code Requirements

The County shall require private investment in infrastructure improvements above and beyond Land Development Code requirements (e.g., feeder roads, aerial fire apparatus, right-of-way, signalization, access improvements, transit facilities, stormwater, etc.) where improvements are needed to accommodate the development and to minimize attendant public costs associated with growth.

Policy FLU 6.6 Concurrency Management

The above policies shall be implemented consistent with the policies of the Implementation Element.



OBJECTIVE FLU 7 INTERGOVERNMENTAL COORDINATION

The County shall continue to coordinate with the cities and other agencies to facilitate consistent facility and land use plans, provide cost-effective services, maintain compatible land uses, and ensure coordination of resource planning and management plans. The County shall coordinate with responsible local, regional and State authorities and private utility companies, as appropriate, in the establishment of level of service standards for public facilities. Upon adoption of the County and adjacent governments' comprehensive plans, the County shall initiate further coordination efforts, if necessary, to ensure consistency with adopted level of service standards

Policy FLU 7.1 Joint Planning Agreements (JPAs) with the City of Winter Springs

The County shall pursue the adoption of a joint planning agreement with the City of Winter Springs to address, at a minimum, future annexations, provision of services and facilities and land use compatibility in the East Rural Area of Seminole County. The JPA shall also include agreement on future densities and intensities of properties that may be annexed and a procedure for resolution of any future conflicts and/or disputes. It shall also include criteria for when and how the urban boundary can be amended and standards for cut through traffic.

Policy FLU 7.2 **Joint Planning Agreements**

The County shall pursue Joint Planning Agreements with each of the cities in Seminole County to address, at a minimum, future annexations, provision of services and facilities and land use compatibility.

Policy FLU 7.3 Future Service Areas

The County shall provide the most cost-effective services to future development by establishing future service area boundaries and through the use of interlocal agreements for water, sewer, drainage, fire protection, and other public facilities.

Policy FLU 7.4 School Sites

The County shall continue coordination and interaction with the School District with regard to locating future school sites, in the acquisition of sites during the development approval process and as to all related matters. The County shall encourage the location of public schools proximate to urban residential areas concurrent with development and the provision of concurrency public facilities, and concurrency public facilities are budgeted for in the appropriate Capital Improvements Plan. At a minimum, public school sites shall be located based on the following criteria:

- A Public school sites shall be located within the County's Urban Growth Boundary or be compatible with compact urban growth patterns; provided, however, that elementary schools, by nature of their service characteristics, are compatible in rural areas but only when located proximate to existing established residential communities;
- B Public school sites shall be served by adequate concurrency public facilities;



C Require that new development outside adopted central service areas shall not be designed nor constructed with central water and/or sewer systems. Public and private central systems may be permitted in the future if it is clearly and convincingly demonstrated by the proponents of the system expansion that a health problem exists in a built but unserved area for which there is no other feasible solution. In such cases, the service area expansion plans will be updated concurrent with an areawide administrative land use update.

Policy FLU 11.11 Methods of Providing Sanitary Sewer Outside of the Adopted Urban Service Area (as depicted in Exhibit FLU: Special Area Boundaries)

Consistent with the provision of services and facilities within the Rural Area, the County shall:

- A Continue to rely primarily upon individual septic tank systems as the method of disposal of wastewater outside the urban services area;
- B Encourage private central systems that exist as of the effective date of this Plan to continue to provide an adequate level of service to users in their respective service areas, although the County shall discourage the expansion of service areas;
- C Require that new development outside adopted central service areas shall not be designed nor constructed with central water and/or sewer systems. Public and private central systems may be permitted in the future if it is clearly and convincingly demonstrated by the proponents of the system expansion that a health problem exists in a built but unserved area for which there is no other feasible solution. In such cases, the service area expansion plans will be updated concurrent with an areawide administrative land use update.

Policy FLU 11.12 Methods of Managing Stormwater

Consistent with the provision of services and facilities within the Rural Area, the County shall:

- A Regulate stormwater management consistent with Countywide regulations with the objective of maximizing aquifer recharge, minimizing flooding and protecting wetland systems; and
- B Continue to use Municipal Service Benefit Units to fund drainage improvements when appropriate.

Policy FLU 11.13 Methods of Collecting and Disposing of Solid Wastes

Consistent with the provision of services and facilities within the Rural Area, the County shall continue to use the solid and hazardous waste collection and disposal systems provided throughout the County to serve the Rural Area.

Policy FLU 11.14 Protection of Natural Resources

The County shall:

- A Protect wetland and flood prone areas in the Rural Area consistent with the provisions of the Future Land Use and Conservation Elements of this Plan and through the potential purchase of properties with funds deriving from the Natural Lands Program authorized by voter referendum in 1990.
- B Periodically re-evaluate the effectiveness of the County Arbor Ordinance, referenced by Policy FLU 1.6.





- C Protect groundwater systems in the Rural Area as depicted in *Exhibit FLU: Special Area Boundaries*, including, but not limited to, the "Geneva Lens" by:
 - 1 Continuing to permit only large lot residential development in the Rural Area to minimize water consumption and maximize aquifer recharge due to small impervious surface areas;
 - Relying on a system of small individual residential wells for the provision of potable water that disperse the potentially adverse effects of groundwater drawdown associated with excessive pumping of the aquifer;
 - Relying on properly installed and periodically inspected septic tanks on large lots that return water to the aquifer to be the primary system of wastewater disposal; and
 - 4 Relying on stormwater management systems designed as required by the Rural Subdivision standards enacted in accordance with the provisions of this Plan to maximize recharge of stormwater into the aquifer.
- D Protect the Econlockhatchee River in East Seminole County by:
 - 1 Regulating development adjacent to the River in accordance with the existing Wetlands Overlay Zoning Classification (see Policy FLU 1.3);
 - 2 Regulating development adjacent to the Econlockhatchee River in accordance with the Econlockhatchee River Protection Overlay Standards Classification;
 - Purchasing properties, when appropriate, with funds from the Natural Lands Program and other Federal, State, and regional programs; and
 - 4 Enforcing provisions in the Land Development Code regarding additional bridge crossings of the Econlockhatchee River.
- E Protect the St. Johns River by:
 - Continuing to enforce the existing Wetlands Overlay Zoning Classification (see Policy FLU 1.3); and
 - Purchasing properties, when appropriate, with funds from the Natural Lands program and other Federal, State and regional programs.

Policy FLU 11.15 Code Enforcement and Implementation

A General

The County shall:

- 1 Continue to enforce Rural Subdivision Standards, as necessary, designed to meet the unique needs of the Rural Area;
- 2 Continue to provide inspection and code enforcement services in the East Rural Area; and





FUTURE LAND USE EXHIBITS

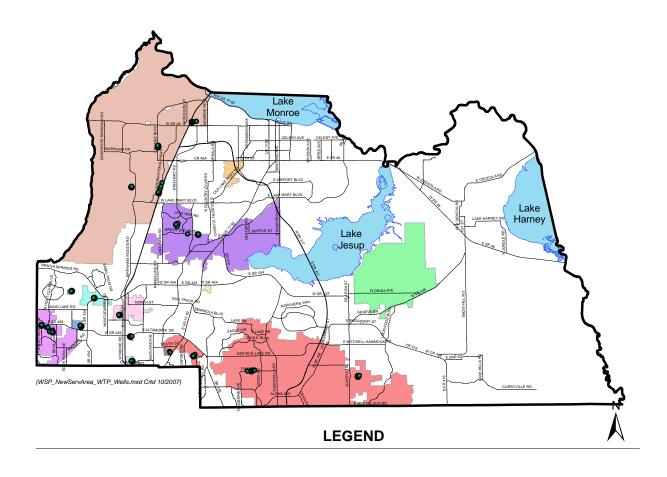
The following exhibits are in support of the Potable Water Element's Water Supply Facilities Work Plan:

- FLU Series County Potable Water Service Areas, Treatment Plants, Wells (Added: Amendment 06EX.TXT03.4.03, Ordinance 2007-XX, 11/13/2007)
- FLU Series Cones of Influence (Added: Amendment 06EX.TXT03.4.04, Ordinance 2007-XX, 11/13/2007)





FLU Series - County Potable Water Service Areas, Treatment Plants, Wells





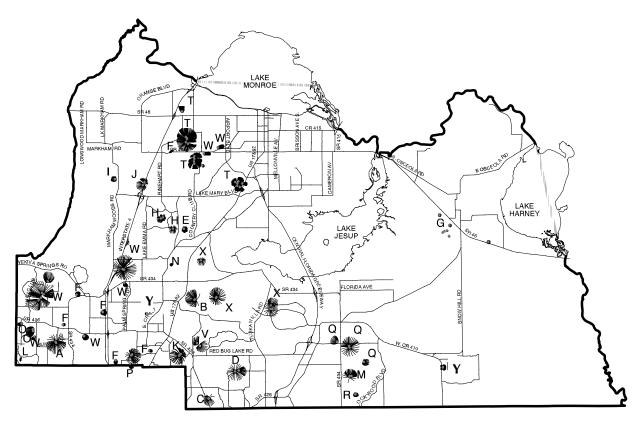
- Seminole County Water Treatment Plants
- Seminole County Water Wells

(Effective date of information: 2007)





FLU Series - Cones of Influence



LEGEND



- A Altamonte Springs
- **B** Casselberry North
- C Casselberry South
- D SemCo Consumers
- E SemCo Country Club
- F SemCo Former FWS
- G Geneva Area Water Assoc
- H SemCo Greenwood Lakes

- I SemCo Hanover Woods
- J Sem Co Heathrow/Lake Mary
- K SemCo Indian Hills
- L UI Jansen
- M SemCo Lake Hayes
- N Longwood
- O SemCo Lynood
- P UI Oakland Shores

- Q Oviedo
- R Palm Valley
- T Sanford
- V Closed
- W Utilities Inc
- X Winter Springs
- Y Aqua Utilities

ATTACHMENT 6

Amendments to the Implementation Element (06F.TXT03.5)

• Revision to Goals, Objectives and Policies

(Note: The amendments have been inserted directly into the appropriate Comprehensive Plan pages in strike and underlined format indicating deletion and addition respectively. Objectives or policies simply being noted as supportive of the Work Plan have their titles underlined.)



No rights to obtain final development orders under which development activity impacting public facilities may ensue, or to obtain development permits, nor any other rights to develop the subject property shall be deemed to have been granted or implied by the County's approval of the development order without a determination having previously been made that the capacity of public facilities will be available in accordance with law.

Policy IMP 2.5 Development Orders: Capacity Determinations and Availability

The availability of public facility capacity to support development orders or permits issued pursuant to Policies IMP 2.3 and IMP 2.4A. shall be concurrent with the impacts of such development and shall be determined in accordance with the following:

- A Potable Water, Sewer, Solid Waste, and Drainage Facilities:
 - <u>H1.</u> The necessary facilities and services are in place at the time a development permit is issued; or
 - <u>H2.</u> Development orders and permits are issued subject to the condition that the necessary facilities and services will be in place when the impacts of the development occur; or
 - ☐3. The necessary facilities are under construction at the time a development order or permit is issued; or
 - ☐4. The necessary facilities are guaranteed in an enforceable development agreement meeting the requirements of the Concurrency Management System Rules of the Department of Community Affairs (Rule 9J-5). The agreement must guarantee that the necessary facilities will be in place when the impacts of the development occur.

B Potable Water Facilities:

1 For potable water, adequate water supplies, and potable water facilities shall be in place and available to serve new development no later than the issuance by the County of a certificate of occupancy or its functional equivalent. Prior to approval of a building permit or its functional equivalent, the County shall consult with the applicable water supplier to determine whether adequate water supplies to serve the new development will be available no later than the anticipated date of issuance by the County of a certificate of occupancy or its functional equivalent.

(Revised: Amendment 06EX.TXT03.5.01, Ordinance 2007-XX, 11/13/2007)

BC Parks and Recreation Facilities:

- Any of the provisions of section A.1.-A.4. listed above for potable water, sewer, solid waste and drainage; or
- The necessary facilities are the subject of a binding executed contract which provides for the commencement of the actual construction of the required facilities within one (1) year of the issuance of the development order or permit; or
 - The necessary facilities are guaranteed in an enforceable development agreement which requires



ATTACHMENT 7

Amendments to the Intergovernmental Element (06F.TXT03.6)

• Revision to Goals, Objectives and Policies

(Note: The amendments have been inserted directly into the appropriate Comprehensive Plan pages in strike and underlined format indicating deletion and addition respectively. Objectives or policies simply being noted as supportive of the Work Plan have their titles underlined.)



OBJECTIVE IGC 3 COORDINATION OF PLAN WITH REGIONAL, STATE AND FEDERAL AGENCIES

Seminole County shall coordinate its Comprehensive Plan with the plans and programs of regional, State and Federal agencies in order to more effectively and efficiently address cross jurisdictional issues through implementation of the following policies:

Policy IGC 3.1 Compliance of State Development with Local Regulations

The County shall continue to review all State and other government development activities for consistency with the Plan and land development regulations. Such development will be considered subject to local regulation unless found to be statutorily exempt, in which case the County shall rely on other coordination mechanisms, including, but not limited to, informal negotiation, to ensure the compatibility of the development with County land development regulations.

Policy IGC 3.2 Division of Historical Resources

The County will continue to coordinate with the Department of State, Division of Historical Resources on Developments of Regional Impacts and CDBG site reviews, maintenance of the Florida Master Site File (FMSF), and matching grants for identification, evaluation and planning for the management of historical resources within Seminole County.

Policy IGC 3.3 Plan Coordination

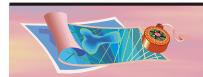
Seminole County shall coordinate its comprehensive planning activities with the plans and programs of regional, State and Federal agencies by, at minimum, continuing to coordinate with the following agencies: East Central Florida Regional Planning Council; St. Johns River Water Management District; Metropolitan Planning Organization (METROPLAN ORLANDO); Central Florida Regional Transportation Authority (LYNX), the Florida Departments of Environmental Protection, Transportation, and Community Affairs; the Florida Public Service Commission, the Seminole County Expressway Authority, the Florida Highway Patrol; and the Federal Agencies of Housing and Urban Development, Federal Transit Administration, Federal Environmental Protection Agency, Federal Emergency Management Agency and the Army Corps of Engineers. The County shall also seek legislative action by the Florida Legislature when the needs of the County so require. The County shall continue to work on issues with the Florida Association of Counties and shall consider working with the Florida League of Cities in so much as the County is now a charter County.

The Water Supply Facilities Work Plan (Work Plan) – The St Johns River Water Management District (District) updates the District Regional Water Supply Plan (DRWSP) every five (5) years. The County's Work Plan shall be updated within 18 months following an update to the DRWSP per Policy POT 5.5 Coordination and Consistency with District Regional Water Supply Plan. This coordination shall be documented in the text of the Work Plan with each amendment.

Additionally, where appropriate and feasible, the Work Plan shall include collaborative approaches with the District and other local governments for water supply source use and development, and water resource development per Policy POT 5.6 Coordination with District and Local Water Providers.

(Revised: Amendment 06EX.TXT03.6.01, Ordinance 2007-XX, 11/13/2007)





INTERGOVERNMENTAL COORDINATION ELEMENT EXHIBIT

The following exhibit is in support of the Potable Water Element's Water Supply Facilities Work Plan:

• Exhibit IGC Existing Coordination Mechanisms With Municipalities Within Seminole County



Existing Coordination Mechanisms With Municipalities Within Seminole County

SUBJECT AREA	COORDINATION MECHANISM	RESPONSIBLE COUNTY DEPARTMENT	EFFECTIVENESS
ALL SEMINOLE COUNTY MUNI	CIPALITIES		
Intergovernmental coordination and conflict mediation	Council of Local Governments of Seminole County (CLGSC, formerly CALNO)	Board of County Commissioners, Planning and Development	Satisfactory
Intergovernmental coordination	Mayors/Managers Working Group	County Manager's Office	Satisfactory
Housing	Interlocal Agreements for HOME and Emergency Shelter Grants and Community Development Block Grant Programs	Planning and Development	Satisfactory
Telecommunications	Interlocal Agreements for Fiber Optics Communication Network and related infrastructure (All cities except Longwood and a pending one with Oviedo)	Information Technologies	Satisfactory
Comprehensive Planning and Land Use	Seminole County Planning Technical Advisory Committee. Interlocal Agreements for Notification of Land Use Activity. (All cities except Longwood)	Planning and Development	Needs Improvement
Transportation (Impact Fees, Concurrency and One Cent Sales Tax)	Formal and informal agreements with City Public Works/Engineering Departments	Public Works	Satisfactory
Utilities (Water, Reclaimed Water and Sewer)	Various Interlocal Agreements for wholesale service	Environmental Services	Satisfactory
Geographical Information System (GIS)		Information Technologies	Satisfactory
Emergency Rescue/Fire Protection	First Response Agreement (All cities except Oviedo)	Public Safety	Satisfactory
Recycling	Intergovernmental Recycling Committee	Public Works	Satisfactory



Seminole County ECONOMIC IMPACT STATEMENT

Date:	11/13/2007	Dept/Div:	P&D/Planning Division									
Contact:	Dick Boyer	Phone Ext:	407-665-7382									
Action:	Adopt an ordinance amending the text of the Comprehensive Plan											
Topic:	Water Supply Facilities	Water Supply Facilities Work Plan										

Describe Project/Proposal

The purpose of this amendment is to comply with Year 2002 legislation to amend the local comprehensive plans to include a ten-year water supply plan as part of the Potable Water Element and make other amendments as required/needed. The goal is to ensure that long term planning for needed water supplies and facilities matches current planning activities and development approvals.

<u>Describe the Direct Economic Impact of the Project/Proposal upon the Operation of the County</u>

The overall expense of providing water to users can be expected to increase since historically normal expansion of the use of groundwater is being restricted to protect this resource. Additionally, other measures to both reduce use and institute the development and use of alternative water supplies are being required.. These are not, however, optional measures. They are legislative requirements. These amendments extend the county's normal five year planning period for water facilities to a ten year period and are done to comply with legislative requirements for expanded water planning.

<u>Describe the Direct Economic Impact of the Project/Proposal upon the Property</u> <u>Owners/Tax Payers/Citizens who are Expected to be Affected</u>

The overall cost to water to users can be expected to increase for the same reasons listed in the previous paragraph.

Identify Any Potential Indirect Economic Impacts, Positive or Negative, Which Might Occur as a Result of the Adoption of the Ordinance

The extended planning horizon and potential for coordination with local and regional water suppliers and users is expected to have a neutral-to-positive economic impact.

Citation

None.

\\is_csb\VOL2\pl\projects\comp plan\water supply\2007\Final Docs\1Agenda - Economic Impact Statement.DOC

Support Document No. 1 - Addendum 2007 Seminole County Water Supply Plan October 2007

Table of Contents

The following items are hereby incorporated into Support Document No. 1 of the Seminole County Water Supply Facilities Work Plan. These items were prepared to add information not included in the original transmittal document. In particular, information is provided regarding the provision of potable water service by city and private water utilities to unincorporated residents/properties and by the County to city residents/properties.

- A List of Other Public Water Suppliers in Seminole County
- B Table 1 Base Data on Other Public Water Suppliers in Seminole County
- C Table 2 Growth Projections in City Served Unincorporated Areas
- D Table 3 Seminole County Major Water Use Categories
- E Map 1 Areas of Potable Water Cross-Service in Seminole County
- F Map 2 Unincorporated Areas of Septic Service
- G Letter District's Entity Notification Letter to Seminole County
- H Letter Seminole County Response to District Letter
- Letter District's Acknowledgement of Receipt of Response
- J Reclaim Ordinance Ordinance 2006-12
- K Water Conservation Ordinance Ordinance 2007-18

List of Public Water Suppliers in Seminole County

The text below is excerpted from the SJRWMD - Seminole County Water Supply Information site which directs local governments to collect Information on the listed water utilities serving within their jurisdictions. (Source: http://www.sjrwmd.com/programs/outreach/local_gov/comp_planning/seminole/seminole.html)

Following this list of utilities to address is a table of general data collected on each of the utilities from a variety of sources.

Public water supplier reports

SJRWMD has compiled reports for the public water suppliers that are projected by SJRWMD to use 0.1 million gallons of water per day (mgd) or more by 2025 and that provide water to areas within the County's jurisdiction, according to the service area map provided above. The reports can be accessed from the list of public water suppliers provided below. The reports provide information regarding the public supplier's permits, service area, projected population, projected water demand, existing and planned water supplies and facilities, and water conservation and reuse practices. Local governments can use the information when updating their comprehensive plans to address water supply planning, but they should verify the information with their public suppliers to ensure that the information is current. The public suppliers listed below must be included in the required comprehensive plan updates relative to the 10-year work plan for building necessary public, private, and regional water supply facilities to meet the water needs in the County's jurisdiction.

Seminole County, CUP 8213 (includes Northeast, Northwest, Southeast, and Southwest service areas)									
Seminole County — Apple Valley, CUP 50281	City of Sanford, CUP 162								
Seminole County — Druid Hills, CUP 3766	City of Winter Springs, CUP 8238								
Seminole County — Meredith Manor, CUP 8359	Palm Valley Mobile Home Park CUP 8266								
City of Altamonte Springs, CUP 8372	Sanlando Utilities Corporation (Utilities Inc) CUP 160								
City of Casselberry, CUP 8284	<u>Utilities Inc. of Florida — Oakland Shores, CUP 8345</u>								
City of Lake Mary, CUP 8282	<u>Utilities Inc. of Florida — Ravenna Park, CUP 8352</u>								
City of Longwood, CUP 8274	<u>Utilities Inc. of Florida — Weathersfield, CUP 8346</u>								
City of Oviedo, CUP 8252	Aqua Utilities Florida Inc. — Chuluota, CUP 8362								

Links to additional public water supplier information

The County should update the inventory of public water suppliers in its comprehensive plan to include those listed in the previous section and other smaller suppliers. The inventory should include the public water suppliers listed below that have CUPs issued by SJRWMD, that are projected to use less than 0.1 million gallons of water per day, and that provide water to areas within the County's jurisdiction, according to the service area map provided above. Local governments can use the CUP numbers to access information on **SJRWMD's E-Permitting Web site** that includes permit status, permit applications, technical staff reports completed by SJRWMD, permits issued, and compliance reports. For instructions on how to access CUP information on the Web site, access **E-Permitting Online Help**.

Seminole County — Dol Ray Manor, CUP 3769
Seminole County — Lake Brantley, CUP 8361
Seminole County — Lake Harriet, CUP 8356
Aqua Utilities Florida Inc. — Harmony Homes, CUP 8357
Lake Harney Water Association, CUP 8229
Mullet Lake Water Association, Inc., CUP 8271
Seminole Woods Community Association, CUP

8462

Utilities Inc. of Florida — Bear Lake, CUP 8348
Utilities Inc. of Florida — Crystal Lake, CUP 8351
Utilities Inc. of Florida — Jansen, CUP 8347

Utilities Inc. of Florida — Little Wekiva, CUP 8349
Utilities Inc. of Florida — Parkridge, CUP 8353
Utilities Inc. of Florida — Phillips, CUP 8350

Twelve Oaks RV Resort, CUP 50932

TABLE 1 - Base Data on Other Public Water Suppliers in Seminole County

Mata = 114:1:4.	C					Drainated				Diamaga	A 14 a m	Davisa
Water Utility	Consump.	Consump.	Auth. Avg	Auth. Max	Current	Projected	Approx.	Type of	Existing	Planned	Alter.	Reuse
Operators in	Use Permit	Use Permit	Daily	Annual	Average	Average	Projected	Water Use	Water	Water	Water	Reclaim
Seminole	Number	Expir. Date	Withdraw	Withdraw	Daily	Daily	Pop 2015		Sources	Sources	Project(s)	Projs
County			in 2015	(mgd)	Demand	Demand						and
Data Sources:	(I)	(I)	(mgd) (I)	(1,11)	(mgd)	2015 (mgd) (I)	(I, II)	(II)	(I)	(I)	(I)	Progs
	Data Sources: (I) (I) (I) (I,II) (I,III) (I) (I, II) (II) (I) (I) (I) (I) (I) (I) (I) (I) (II) (II)									(1)	(1)	
Northeast	8213	11/30/2003	3.02	1102	2.418	3.45	22708	PS/Comm	Floridan	Floridan	a,b,d-g	Yes
Northwest	8230	3/11/2010		3003	6.868				Floridan	Flor/Surf	a,b,d-g a,b,d-g	Yes
Southeast	8245	12/31/2003			9.066				Floridan	Floridan	a,b,d-g a,b,d-g	Yes
	8243	9/10/2002		589	1.403			PS/Comm	Floridan	Floridan		Yes
Southwest		CUP combini									a,b,d-g	168
Apple Valley	50281	3/7/2026			0.55				Floridan	Floridan	o b d a	No
Apple Valley						0.7	3//4	Po	rionan	Floridani	a,b,d-g	INO
Druid Hills	3766	as a separately 9/16/2012	•		0.118	0.11	570	PS/Comm	Floridan	Floridon	abda	No
									rionan	Floridan	a,b,d-g	No
		king into the p 5/8/2022							Floridon	Floridon		No
Meredith Manor	8359								Floridan	Floridan	a,b,d-g	No
		king into the p							Cara arranta		4 1 !	
A.2 MUNICIPAL U										T	T .	V
Altamonte Spg	8372	3/8/2026			7.69		,	PS/Comm	Floridan	Floridan	a, b, g	Yes
Casselberry	8284	8/8/2020		2563	6.58		,	PS/Comm	Floridan	Floridan	a, b	Yes
Lake Mary	8282	5/11/2025		1590	3.45			PS/Comm	Floridan	Floridan	a, b, e	Yes
Longwood	8274	9/10/2022		818	2.13			PS/Comm	Floridan	Floridan	a, b	No
Oviedo	8252	10/9/2006			4.52			PS/Comm	Floridan	Floridan	a, b, d	Yes
Sanford	162	2/7/2026			7.21			PS/Comm	Floridan	Floridan	a, b, e	Yes
Winter Spg	8238	10/8/2006	5.19	1964	5.11	5.49	39,694	PS/Comm	Floridan	Floridan	a, b, h	Yes
A.3 PRIVATE/MA	JOR											
Utilities, Inc.			1				1					
Oakland Shores	8345	,,		35.36	0.1	0.1	326	PS	Floridan	Floridan	a,b,c	No
		uilt-out service										
Ravenna Park	8352			44.57	0.09	0.1	976	PS	Floridan	Floridan	a,b,c	No
	•	uilt-out service										
Sanlando Util	160			3685	9.94	10.61	37529	PS/Comm	Floridan	Floridan	a,b,c	Yes
		t in service are								_		
Weathersfield	8346			117	0.37	0.37	3319	PS/ Comm	Floridan	Floridan	a,b,c	No
	Essentially b	uilt-out service	area.									
Aqua Utilities												
Chuluota	8362	4/12/2007	0.531	212	0.56	0.91	5781	PS/Comm	Floridan	Floridan	a,b	No
Other Providers												
Palm Valley MH P	8266	12/20/2006	0.235	86	0.35	0.44	2254	PS/Comm	Floridan	Floridan	а	Yes
	NOTE: Year	2015 demand	projection, p	opulation an	d Alternativ	e Water Proj	are from the	District's Pub	lic Water Su	ıpplier Repo	rt site.	
		·						· · · · · · · · · · · · · · · · · · ·				

TABLE 1 - Base Data on Other Public Water Suppliers in Seminole County

Water Utility Operators in Seminole County	Consump. Use Permit Number	Consump. Use Permit Expir. Date	Auth. Avg Daily Withdraw in 2015 (mgd)	Auth. Max Annual Withdraw (mgd)	Current Average Daily Demand (mgd)	Projected Average Daily Demand 2015 (mgd)	Approx. Projected Pop 2015	Type of Water Use	Existing Water Sources	Planned Water Sources	Alter. Water Project(s)	Reuse Reclaim Projs and Progs	
Data Sources:	(I)	(I)	(I)	(I,II)	(1,111)	(I)	(I, II)	(II)	(I)	(I)	(I)	(I)	
B MINOR UTILITI		pplicable/avail	able, a text '	Project Desc	cription" fron	n the District's	s E-Permittin	g site is inclu	ded for eacl	h utility.			
County Operated													
Dol Ray Manor					0.118	0.027			Floridan	Floridan	NA	No	
	Altamonte Springs currently providing service thorough an emergency interconnect. Wholesale service interlocal is being prepared. 2015 projected CDD estimated as 249*110 gpd/pcapita												
Fern Park	INA	INA	INA	INA	INA	INA	INA	INA	INA	INA	INA	INA	
	Altamonte Springs currently providing service thorough an emergency interconnect. Future plans in progress to fully integrate this system into the County's Southeast Water Service system. WMD E-Permitting system indicates plant is closed which explains the lack of information.												
Lake Brantley	8361			9.2					Floridan	Floridan	INA	No	
		connect with Sa							a				
Lake Harriet	8356			35.04					Floridan	Floridan		No	
		orings currently uthwest Water							ogress to ful	lly integrate t	his system ir	nto the	
Utilities, Inc.													
Bear Lake	8348								Floridan	Floridan	INA	INA	
		authorizes, as I oply for an esti					of 28.9 millio	n gallons per	year of grou	und water fro	m the Florid	an aquifer	
Crystal Lake	8351	11/15/2020	0.0553	20.19	0.044	0.0553	520	PS	Floridan	Floridan	INA	INA	
	for public sur	authorizes, as l oply for an esti	mated popul	ation of 520.	Essentially	built-out			, ,			•	
Jansen	8347	6/14/2016							Floridan	Floridan		INA	
		t proposes to v											
Little Wekiva	8349			8.76					Floridan	Floridan	INA	INA	
		authorizes, as l oply for an esti										an aquifer	
Park Ridge		11/15/2020							Floridan	Floridan		INA	
		authorizes, as I oply for an esti	•	•			of 9.40 millio	n gallons per	year of grou	und water fro	m the Florid	an aquifer	
Phillips	8350						231	PS	Floridan	Floridan	INA	INA	
,		t proposes to v							se. Essentia		-		
Aqua Utilities	• •	•		<u> </u>	•	<u> </u>		7,		•			
Harmony Homes	8357	INA	0.89	8.47	0.015	INA	5184	PS/Comm	Floridan	Floridan	INA	No	
j	The District a for household	authorizes, as l d type uses.	imited by the	attached pe						und water fro	m the Florid	an aquifer	

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Water Utility	Consump.	Consump.	Auth. Avg	Auth. Max	Current	Projected	Approx.	Type of	Existing	Planned	Alter.	Reuse
Operators in	Use Permit	Use Permit	Daily	Annual	Average	Average	Projected	Water Use	Water	Water	Water	Reclaim
Seminole	Number	Expir. Date	Withdraw	Withdraw	Daily	Daily	Pop 2015		Sources	Sources	Project(s)	Projs
County			in 2015	(mgd)	Demand	Demand						and
			(mgd)		(mgd)	2015 (mgd)						Progs
Data Sources:	(I)	(I)	(I)	(1,11)	(1,111)	(I)	(I, II)	(II)	(I)	(I)	(I)	(I)
Other Providers												
L. Harney	8229	10/5/2010	INA	21.03	0.045	0.058	705	PS/Comm	Floridan	Floridan	INA	No
	Utility is in the	e east rural are	ea of the Cou	ınty near Ge	neva. 210 s	ervice conne	ctions with p	ossibility of 3	55 by approx	x 2020.		
L. Mullet	8271	10/30/2022	INA	20.96	0.056	0.057	896	PS/Comm	Floridan	Floridan	INA	No
	Utility is in the	e east rural are	ea of the Cou	ınty near Ge	neva. 294 s	ervice conne	ctions. Esser	ntially built-ou	it with projec	cted growth o	of 73 residen	ts by 2022.
Seminole Woods	8462	7/7/2014	INA	33.47	0.071	0.088	917	PS/Comm	Floridan	Floridan	INA	No
	Utility is in the	e east rurl area	a of the Cour	nty near Gen	eva. 735 res	sidents serve	d in 2003, 91	7 expected b	y 2023. Ess	sentially built	-out.	
Twelve Oaks RV	50932	11/11/2019	INA	11.68	0.0076	0.0076	76	PS/Comm	Floridan	Floridan	INA	No
	Permit notes	247 lots are in	the RV park	and estima	tes water us	e at 91gpd pe	er resident.	FDEP Drinkir	ng Water Da	tabase show	s 7,582 as a	n average

A. County, Municipal, Private/Major Water Providers

Listed are those required to be addressed by the District per the "Public Water Supplier Reports" section of "Seminole Co Water Supply Information".

B. Minor Utilities

Additional water providers generally providing less than .100 mgd of ADF service that are required by the District to be noted under the "Links to additional public water supplier information" of "Seminole Co Water Supply Information". The source of the lists for both A and B above can be found at: http://www.sjrwmd.com/programs/outreach/local_gov/comp_planning/seminole/seminole.html

Data Sources:

Information for this table is set out in the FDCA "Guide for Local Governments in Preparing Water Supply Comprehensive Plan Amendments and Water Supply Facilities Work Plans". Note that although the "Guide" requests "Authorized Max Daily Withdrawal" the utility CUPs provide only the annual figure shown.

The major data souces used were:

I SJRWMD Public Water Suppplier Report
II SJRWMD Consumptive Use Permits
III FDEP Drinking Water Database

D - Daily figure

R - Retail

W - Wholesale agreement

NA - Not Applicable

INA - Information Not Available

PS - Public Supply. Includes household water use

Comm - Commercial water use

Additional data sources included:

- Returned County surveys sent to all utilities
- City Water Supply Plans made available to the County
- District's E-Permitting site: https://permitting.sjrwmd.com/epermitting/jsp/LoginProcessor.do
- District's GIS site: http://arcimspub.sjrwmd.com/website/cupwell/viewer.htm?
 http://arcimspub.sjrwmd.com/website/cupwell/viewer.htm?
 Title=SJRWMD%20GIS-RDBMS%20Web-based%20Front-end%20Tool
 http://arcimspub.sjrwmd.com/website/cupwell/viewer.htm?
 http://arcimspub.sjrwmd.com/website/cupwell/viewer.htm?
 Title=SJRWMD%20GIS-RDBMS%20Web-based%20Front-end%20Tool
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TABLE 1 - Base Data on Other Public Water Suppliers in Seminole County

	Water Utility	Consump.	Consump.	Auth. Avg	Auth. Max	Current	Projected	Approx.	Type of	Existing	Planned	Alter.	Reuse
	Operators in	Use Permit	Use Permit	Daily	Annual	Average	Average	Projected	Water Use	Water	Water	Water	Reclaim
	Seminole	Number	Expir. Date	Withdraw	Withdraw	Daily	Daily	Pop 2015		Sources	Sources	Project(s)	Projs
	County			in 2015	(mgd)	Demand	Demand						and
				(mgd)		(mgd)	2015 (mgd)						Progs
L	Data Sources:	(I)	(I)	(I)	(1,11)	(1,111)	(I)	(I, II)	(II)	(I)	(I)	(I)	(I)

Alternative Water Supply Development Projects Identified from the District's "Seminole Co Water Supply Information" site

- a St. Johns River near Lake Monroe
- **b** St. Johns River near Deland
- c Alafaya Reclaimed Water Storage and High Service Pumps Project #16
- d Eastern Orange and Seminole Counties Regional Reclaimed Water Reuse System
- e North Seminole Regional Reclaimed Water and Surface Water Augmentation System Expansion and Optimization Project
- f Seminole County Yankee Lake Reclaimed Water System Augmentation (single water supply entity project number 55)
- **g** Apopka and Winter Garden Reuse Partnership Project
- h Winter Springs Lake Jesup Reclaimed Water Augmentation Project

(KeySemCoWaterProviders.xls)

Table 2 **Growth Projections in City Served Unincorporated Areas**

Housing, Population and Employment Change During Planning Period For City Retail Service Areas to the Unincorporated County

	Single	Multi				Nonhouse			
	Family	Family	Single	Multi	Hotel/	hold		Total	
	Housing	Housing	Family	Family	Motel	Resident	Seasonal	Functional	Total
AREA	Units	Units	Population	•		Pop.	Population	Population	Employment
	2008	2008	2008	2008	2008	2008	2008	2008	2008
TAZ 104	368	4	1,025	5	0	12	1	1,043	118
TAZ 105	697	92	1,925	309	0		6	2,240	249
TAZ 110	1,382	82	3,666		0		2	3,849	373
TAZ 115	752	1,380	2,078		0		20	4,724	797
TAZ 116	756	96	1,747	192	0		5		1,378
TAZ 117	0	1,244	0	2,485			5	,	316
TAZ 121	644	0	1,735	0		_	4	1,739	191
TAZ 122	551	564	1,631	883			11	2,621	498
TAZ 142	527	54	1,629	88			3		6,380
TAZ 143	286	4	844	8			0		596
TAZ 157	465	6	1,156				0	, -	1,454
TAZ 174	283	250	725	507	0		25	1,257	483
TAZ 212	295	0	792	0		-	0		82
	7,006	3,776	18,953	7,194	96	108	82	26,433	12,915
-									
AREA	2020	2020	2020	2020	2020	2020	2020	2020	2020
TAZ 104	455	4	1,242	5	0	13	1	1,261	148
TAZ 104 TAZ 105	455 697	4 92	1,242 1,888	5 302	0	13 0	_	1,261 2,194	148 249
TAZ 104 TAZ 105 TAZ 110	455 697 1,382	4 92 82	1,242 1,888 3,607	5 302 161	0 0 0	13 0 19	1 4 1	1,261 2,194 3,788	148 249 417
TAZ 104 TAZ 105 TAZ 110 TAZ 115	455 697 1,382 752	92 82 1,380	1,242 1,888 3,607 2,038	5 302 161 2,528	0 0 0	13 0 19 86	1 4 1 15	1,261 2,194 3,788 4,667	148 249 417 797
TAZ 104 TAZ 105 TAZ 110 TAZ 115 TAZ 116	455 697 1,382 752 772	92 82 1,380 97	1,242 1,888 3,607 2,038 1,760	5 302 161 2,528 191	0 0 0 0	13 0 19 86 0	1 4 1 15 4	1,261 2,194 3,788 4,667 1,955	148 249 417 797 1,458
TAZ 104 TAZ 105 TAZ 110 TAZ 115 TAZ 116 TAZ 117	455 697 1,382 752 772	4 92 82 1,380 97 1,244	1,242 1,888 3,607 2,038 1,760	5 302 161 2,528 191 2,454	0 0 0 0 0	13 0 19 86 0	1 4 1 15 4	1,261 2,194 3,788 4,667 1,955 2,458	148 249 417 797 1,458 316
TAZ 104 TAZ 105 TAZ 110 TAZ 115 TAZ 116 TAZ 117 TAZ 121	455 697 1,382 752 772 0 644	92 82 1,380 97 1,244	1,242 1,888 3,607 2,038 1,760 0 1,702	5 302 161 2,528 191 2,454	0 0 0 0 0 0	13 0 19 86 0 0	1 4 1 15 4 4 3	1,261 2,194 3,788 4,667 1,955 2,458 1,705	148 249 417 797 1,458 316 221
TAZ 104 TAZ 105 TAZ 110 TAZ 115 TAZ 116 TAZ 117 TAZ 121 TAZ 122	455 697 1,382 752 772 0 644 555	4 92 82 1,380 97 1,244 0 564	1,242 1,888 3,607 2,038 1,760 0 1,702 1,608	5 302 161 2,528 191 2,454 0 875	0 0 0 0 0 0 0 0	13 0 19 86 0 0	1 4 1 15 4 4 3 8	1,261 2,194 3,788 4,667 1,955 2,458 1,705 2,587	148 249 417 797 1,458 316 221 625
TAZ 104 TAZ 105 TAZ 110 TAZ 115 TAZ 116 TAZ 117 TAZ 121 TAZ 122 TAZ 142	455 697 1,382 752 772 0 644 555 671	92 82 1,380 97 1,244 0 564	1,242 1,888 3,607 2,038 1,760 0 1,702 1,608 2,022	5 302 161 2,528 191 2,454 0 875	0 0 0 0 0 0 0 0 0 96	13 0 19 86 0 0 0	1 4 1 15 4 4 3 8 3	1,261 2,194 3,788 4,667 1,955 2,458 1,705 2,587 2,137	148 249 417 797 1,458 316 221 625 6,656
TAZ 104 TAZ 105 TAZ 110 TAZ 115 TAZ 116 TAZ 117 TAZ 121 TAZ 122 TAZ 142 TAZ 143	455 697 1,382 752 772 0 644 555 671 427	92 82 1,380 97 1,244 0 564 59	1,242 1,888 3,607 2,038 1,760 0 1,702 1,608 2,022 1,234	5 302 161 2,528 191 2,454 0 875 112	0 0 0 0 0 0 0 96	13 0 19 86 0 0 0 0	1 4 1 15 4 4 3 8 3	1,261 2,194 3,788 4,667 1,955 2,458 1,705 2,587 2,137 1,257	148 249 417 797 1,458 316 221 625 6,656
TAZ 104 TAZ 105 TAZ 110 TAZ 115 TAZ 116 TAZ 117 TAZ 121 TAZ 122 TAZ 142 TAZ 143 TAZ 157	455 697 1,382 752 772 0 644 555 671 427 491	92 82 1,380 97 1,244 0 564 59	1,242 1,888 3,607 2,038 1,760 0 1,702 1,608 2,022 1,234 1,203	5 302 161 2,528 191 2,454 0 875 112 23	0 0 0 0 0 0 0 96 0	13 0 19 86 0 0 0 0	1 4 1 15 4 4 3 8 3 0	1,261 2,194 3,788 4,667 1,955 2,458 1,705 2,587 2,137 1,257 1,209	148 249 417 797 1,458 316 221 625 6,656 603 1,607
TAZ 104 TAZ 105 TAZ 110 TAZ 115 TAZ 116 TAZ 117 TAZ 121 TAZ 122 TAZ 122 TAZ 143 TAZ 157 TAZ 174	455 697 1,382 752 772 0 644 555 671 427 491	92 82 1,380 97 1,244 0 564 59 10 6	1,242 1,888 3,607 2,038 1,760 0 1,702 1,608 2,022 1,234 1,203 737	5 302 161 2,528 191 2,454 0 875 112 23 6	0 0 0 0 0 0 96 0 0	13 0 19 86 0 0 0 0 0	1 4 1 15 4 4 3 8 3 0 0	1,261 2,194 3,788 4,667 1,955 2,458 1,705 2,587 2,137 1,257 1,209	148 249 417 797 1,458 316 221 625 6,656 603 1,607
TAZ 104 TAZ 105 TAZ 110 TAZ 115 TAZ 116 TAZ 117 TAZ 121 TAZ 122 TAZ 142 TAZ 143 TAZ 157	455 697 1,382 752 772 0 644 555 671 427 491 290 298	4 92 82 1,380 97 1,244 0 564 59 10 6 250	1,242 1,888 3,607 2,038 1,760 0 1,702 1,608 2,022 1,234 1,203 737 791	5 302 161 2,528 191 2,454 0 875 112 23 6 509	0 0 0 0 0 0 0 96 0 0	13 0 19 86 0 0 0 0 0 0	1 4 1 15 4 4 3 8 3 0 0 0 20	1,261 2,194 3,788 4,667 1,955 2,458 1,705 2,587 2,137 1,257 1,209 1,266 791	148 249 417 797 1,458 316 221 625 6,656 603 1,607 483
TAZ 104 TAZ 105 TAZ 110 TAZ 115 TAZ 116 TAZ 117 TAZ 121 TAZ 122 TAZ 122 TAZ 143 TAZ 157 TAZ 174	455 697 1,382 752 772 0 644 555 671 427 491	92 82 1,380 97 1,244 0 564 59 10 6	1,242 1,888 3,607 2,038 1,760 0 1,702 1,608 2,022 1,234 1,203 737	5 302 161 2,528 191 2,454 0 875 112 23 6	0 0 0 0 0 0 96 0 0	13 0 19 86 0 0 0 0 0	1 4 1 15 4 4 3 8 3 0 0	1,261 2,194 3,788 4,667 1,955 2,458 1,705 2,587 2,137 1,257 1,209	148 249 417 797 1,458 316 221 625 6,656 603 1,607 483
TAZ 104 TAZ 105 TAZ 110 TAZ 115 TAZ 116 TAZ 117 TAZ 121 TAZ 122 TAZ 142 TAZ 143 TAZ 157 TAZ 174 TAZ 212	455 697 1,382 752 772 0 644 555 671 427 491 290 298 7,434	4 92 82 1,380 97 1,244 0 564 59 10 6 250 0	1,242 1,888 3,607 2,038 1,760 0 1,702 1,608 2,022 1,234 1,203 737 791 19,832	5 302 161 2,528 191 2,454 0 875 112 23 6 509 0 7,166	0 0 0 0 0 0 96 0 0 0 0	13 0 19 86 0 0 0 0 0 0 0	1 4 1 15 4 4 3 8 3 0 0 0 20 0	1,261 2,194 3,788 4,667 1,955 2,458 1,705 2,587 2,137 1,257 1,209 1,266 791 27,275	148 249 417 797 1,458 316 221 625 6,656 603 1,607 483 85
TAZ 104 TAZ 105 TAZ 110 TAZ 115 TAZ 116 TAZ 117 TAZ 121 TAZ 122 TAZ 122 TAZ 143 TAZ 157 TAZ 174	455 697 1,382 752 772 0 644 555 671 427 491 290 298	4 92 82 1,380 97 1,244 0 564 59 10 6 250	1,242 1,888 3,607 2,038 1,760 0 1,702 1,608 2,022 1,234 1,203 737 791	5 302 161 2,528 191 2,454 0 875 112 23 6 509	0 0 0 0 0 0 96 0 0 0 0 0	13 0 19 86 0 0 0 0 0 0	1 4 1 15 4 4 3 8 3 0 0 0 20	1,261 2,194 3,788 4,667 1,955 2,458 1,705 2,587 2,137 1,257 1,209 1,266 791	148 249 417 797 1,458 316 221 625 6,656 603 1,607

Change	428	12	879	-28	0	10	-19	842	750
% Chg	6%	0%	5%	0%	0%	9%	-23%	3%	6%

(CityDemandCheck.xls)

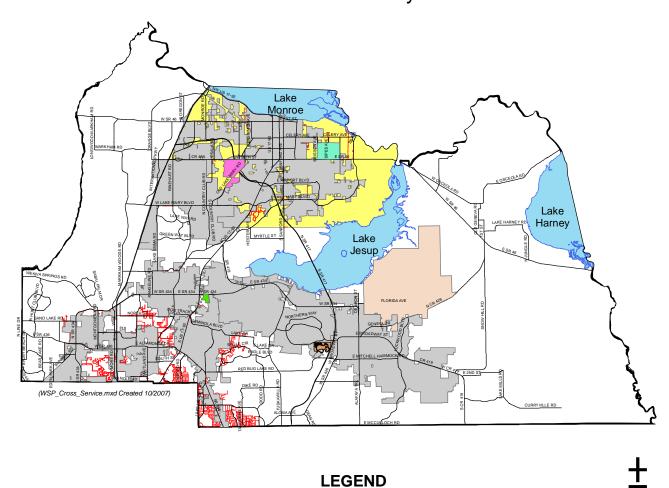
Table 3

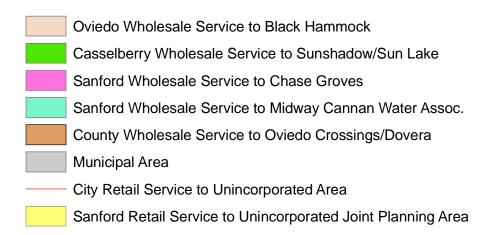
Seminole County Water Use Categories							
Water Use Category 1995	Withdrawal 2025	Projected Withdrawal	Percent Change				
Public Supply	50.7	91.73	81%				
Domestic Self-Supply	2.56	2.56	0%				
Agriculture/Recreational	3.15	1.8	-43%				
Commercial/industrial	0.06	0.06	0%				
Free Flowing Wells	0.63	0	-100%				
Total	57.09	96.15	68%				

Source: "Table 11. East-central Florida groundwater flow model, Floridan aquifer withdrawals by county, water management district and water use category" - Water Supply Development Component - TECHNICAL PUBLICATION SJ2006-2, DISTRICT WATER SUPPLY PLAN, 2006

(MajorWaterUseCategories.xls)

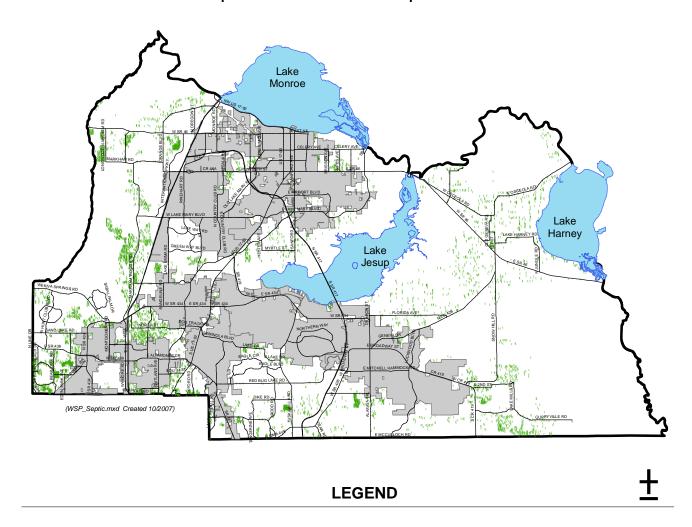
Map 1
Areas of Potable Water Cross-Service in Seminole County





(Effective date of information: 2007)

Map 2 Unincorporated Areas of Septic Service



Unincorporated Septic Locations

Municipal Area



4049 Reid Street • P.O. Box 1429 • Palatka, FL 32178-1429 • (386) 329-4500 On the Internet at www.sjrwmd.com.

CERTIFIED MAIL

May 30, 2006

To:

Ms. Cynthia Coto

Seminole County

1101 E. First Street. County Services Bldg

Sanford, FL 32771

From:

Kirby B. Green III

Executive Director

Re:

District Water Supply Plan 2005, Water Supply Entity Notification

The St. Johns River Water Management District's Governing Board approved the District Water Supply Plan 2005 (DWSP 2005), on February 7, 2006. Based on the provisions of Section 373.0361, *Florida Statutes* (*F.S.*), the District is required to notify, by certified mail, each water supply entity that should implement water supply development project options, as identified in DWSP 2005. The purpose of this memorandum is to comply with that requirement, to notify you of other important, related provisions of the statute, and to advise you of a change in the District's intent to annually solicit additional water supply development projects. Please carefully review the following six (6) important issues.

1. Water supply development project option(s) identified for your water supply entity must be considered (373.0361(7)(a), F.S.).

The following water supply development project(s) is/are identified in DWSP 2005 (Table 14) as options that should be implemented by your water supply entity. At least one should be implemented.

- Eastern Orange and Seminole Counties Regional Reclaimed Water Reuse Project
- North Seminole Regional Reclaimed Water and Surface Water Augmentation System Expansion and Optimization Project
- St. Johns River Near Lake Monroe
- St. Johns River Near Deland
- Seminole County Yankee Lake Reclaimed Water System Augmentation Project

2. A response is REQUIRED from your water supply entity (373.0361(7)(b), F.S.).

Within one year after the date of receipt of this notification, your water supply entity is REQUIRED to provide the District written notification of the following:

GOVERNING BOARD

- Which, if any, of the water supply development project options identified above your entity has developed or intends to develop
- An estimate of the quantity of water to be produced by each project
- The status of project implementation including
 - o Financial planning
 - o Facilities master planning
 - o Permitting
 - Activities/efforts in coordinating or participating in multi-jurisdictional projects, if applicable

A format for this written notification will be available on the District's Website by September 1, 2006.

3. An annual progress report is REQUIRED from your water supply entity (373.0361(7)(b), F.S.).

Your water supply entity is REQUIRED to annually update the information described in item 2 above and provide it in the form of a progress report to the District by November 15 of each year following your original written notification to the District. A format for this progress report will be available on the District's Website by January 15, 2007.

4. Notification is REQUIRED of other water supply development projects proposed by your water supply entity (373.0361(7)(b), F.S.).

If your water supply entity does not intend to develop one or more of the water supply development project options identified above it is required to:

- Propose to the District, within one year after this notification, another alternative water supply development project option sufficient to address the projected water supply needs for your water supply entity as presented in DWSP 2005
- Provide an estimate of the quantity of water to be produced by the project
- Describe the status of project implementation including
 - o Financial planning
 - o Facilities master planning
 - o Permitting
 - Activities/efforts in coordinating or participating in multi-jurisdictional projects, if applicable

The same format made available for item 2 above may be utilized for this notification.

5. A request from your water supply entity is REQUIRED if the project(s) identified in item 4 is to be considered for inclusion in the district water supply plan (373.0361(7)(b), F.S.).

Your water supply entity may request that the District Governing Board consider inclusion of the alternative water supply development project(s) identified in item 4 in its next water supply plan update or amendment. The project(s) will be included in the next water supply plan update or

amendment if the Governing Board considers the project(s) to be acceptable. However, inclusion in the water supply plan update or amendment does not assure that the project(s) will receive Water Protection and Sustainability Program cost-share funding. Projects included in the current version of the district water supply plan (DWSP 2005) will continue to be considered for Water Protection and Sustainability Program (WPSP) cost-share funding.

6. Solicitation of additional water supply development projects will be integrated into required reporting.

During the DWSP 2005 public review process the District expressed the intent for an annual update process that would focus on solicitation of additional water supply development project proposals and adding acceptable projects to an annual update of the water supply plan. The intent of this annual update process was to provide an opportunity for projects to become eligible for WPSP cost-share funding. However, based on closer review of the statutory notification and response requirements, which are the subject of this memorandum, and based on guidance from the Governing Board concerning the direction of WPSP funds to its priority projects and/or to projects that will be identified as a result of ongoing county-level planning processes, the District has determined that a separate annual solicitation process is unnecessary. Water supply development projects identified in DWSP 2005 will remain eligible for WPSP funding consideration, but inclusion in DWSP does not assure funding.

Additional Information

If you have any questions regarding this memorandum or would like to schedule a meeting to discuss the District's findings and recommendations concerning your water supply entity, please contact:

Charlotte St. John, Project Manager St. Johns River Water Management District P.O. Box 1429 Palatka, Fl 32178-1429 csjohn@sjrwmd.com (386) 689-5528 (cell phone) (386) 663-4523 (business phone)

DWSP 2005 is available on the District's Web site at sjrwmd.com (click on the Water Supply quick clicks button).

Other information is available on the District's Web site at http://www.sjrwmd.com/SB444/index.html.

Copy to: Mr. John Cirello

ENVIRONMENTAL SERVICES DEPARTMENT



June 1, 2007

Mr. Kirby B. Green III
Executive Director
St. Johns River Water Management District
4049 Reid Street
Palatka, Florida 32178

Re: Implementation of District Water Supply Plan Projects

In response to your May 20, 2007 letter this letter serves as notification that Seminole County is implementing the Yankee Lake Reclaimed Water System Augmentation project identified in the District's 2005 Water Supply Plan (Project No. 55).

Design of the project is approximately 80% complete with bidding scheduled to start later this summer. The project will provide up to 10 MGD of water from the St. Johns River to augment the County's reclaimed water system.

Should you require any additional information regarding this project, please contact me at (407) 665-2003.

Sincerely,

John Cirello, Ph.D., P.E.

Director Environmental Services Department

Seminole County Government



4049 Reid Street • P.O. Box 1429 • Palatka, FL 32178-1429 • (386) 329-4500 On the Internet at www.sjrwmd.com.

June 12, 2007

RECEIVED

Mr. John Cirello, Ph.D.,P.E. Director Environmental Services Department Seminole County 500 West Lake Mary Boulevard Sanford, FL 32773-7499

JUN 18 2007

DEPT. OF ENVIRONMENTAL SERVICE PEI

Dear Mr. Cirello:

This is to acknowledge receipt of your response to the SJRWMD notification regarding the requirements of 373.0361(7)(a), Florida Statutes concerning water supply sources to meet future needs. SJRWMD will contact you if additional information is needed.

Sincerely

Don Brandes, Ph.D Senior Project Manager

GOVERNING BOARD

John G. Sowinski, VICE CHAIRMAN

ORLANDO

Ann T. Moore, SECRETARY

W. Leonard Wood

FERNANDINA BEACH

AN ORDINANCE REPEALING SECTIONS 6.1 and 9.23, APPENDIX F OF THE LAND DEVELOPMENT CODE OF SEMINOLE COUNTY; AMENDING CHAPTER 270, PART 4, ARTICLE III, OF THE SEMINOLE COUNTY CODE BY CREATING SECTIONS 270.225 THROUGH 270.229; PROVIDING FOR PURPOSE OF RECLAIMED WATER SERVICE PROMULGATION AND ENFORCEMENT; PROVIDING FOR USE OF RECLAIMED WATER; PROVIDING ADMINISTRATIVE REQUIREMENTS; PROVIDING FOR RECLAIMED WATER SYSTEM REQUIREMENTS; PROVIDING FOR CODIFICATION; PROVIDING FOR SEVERABILITY; AND PROVIDING AN EFFECTIVE DATE.

WHEREAS, the Board of County Commissioners (Board) has evaluated the provisions of the County's land development regulations relative to a reclaimed water program, and has concluded that certain provisions of the County's Codes should be amended to address the Board's concerns pertaining to technical modification of the program to allow additional utilization of reclaimed water and to protect the potable water supply in the County; and

WHEREAS, the purpose of this ordinance is to create a Reclaimed Water Program for Seminole County; and

WHEREAS, compliance with St. Johns River Water Management
District permits and policies coupled with demands of a growing
population have increased the need for additional water
conservation measures; and

whereas, the highest priority for use of potable water is for human consumption, it is the intent of the County to minimize the use of potable water supplies for nonpotable uses and the substitution of irrigation-quality wastewater effluent

for nonpotable uses provides a primary water conservation method that serves to protect the integrity of the aquifer to maintain groundwater supply to existing legal uses and future generations; and

WHEREAS, the County recognizes that reclaimed water is a valuable resource, this Ordinance will outline County management and enforcement responsibilities that facilitate use of reclaimed water to the greatest extent possible to replace the use of potable water for nonpotable uses; and

WHEREAS, significant involvement has been achieved relative to the proposed changes to the County's Codes as set forth in this Ordinance; and

WHEREAS, the Board of County Commissioners of Seminole County hereby finds that this Ordinance is consistent objectives, goals policies and of the Seminole County Comprehensive Plan; and

WHEREAS, the Seminole County Home Rule Charter requires that an Economic Impact Statement be prepared to address the potential fiscal impacts and economic costs of this Ordinance upon the public and taxpayers of Seminole County and such Economic Impact Statement has been prepared and has been made available for public review and copying prior to the enactment of this Ordinance in accordance with the provisions of the Seminole County Home Rule Charter,

NOW, THEREFORE, BE IT ORDAINED BY THE BOARD OF COUNTY COMMISSIONERS OF SEMINOLE COUNTY, FLORIDA:

- Section 1. Appendix F, Section 6.1, Land Development Code of Seminole County, is hereby repealed in its entirety:
- Section 2. Appendix F, Section 9.23, Land Development Code of Seminole County, is hereby repealed in its entirety.
- Section 3. Chapter 270, Part 4, Article III, Seminole County Code is hereby amended to read as follows:

Secs. 270.230-270-250 Reserved.

Section 4. Chapter 270, Part 4, Article III, Seminole County Code, Secs. 270.225 through 270.229, are hereby created to read as follows:

Sec. 270.225. Purpose. The County's Reclaimed Water System is presently available for the primary purpose of irrigation.

Sec. 270.226. Promulgation And Enforcement.

- (a) Connection Guidelines for Existing Utility Customers
- (1) Upon notification from the Environmental Services Department Director (Director) that reclaimed water is available, the customer shall disconnect the irrigation system from the potable water system within six (6) months of the notification. For the purposes of this Section, the term available means that a reclaimed water line is located within one hundred fifty feet (150') from the customer's property boundary.

(2) Any existing residential customer with landscaping that meets all standards for water-efficient landscaping set forth in Sec. 30.1229 shall not be required to disconnect from the potable water system as long as such property continues to meet the water-efficient landscaping standards and to irrigate the landscaping in a water conserving manner. The Director, or his/her designee, shall determine compliance with the water-efficient landscaping standards for purposes of this exemption.

(b) Irrigation Meters

- (1) Reclaimed water meters shall be installed and potable water irrigation meters removed during connection to the reclaimed water service line. No irrigation with potable water from the County's potable water system shall occur if reclaimed water is available.
- (2) In the event that the County is unable to deliver an adequate supply of reclaimed water, and has provided written notification to its customers, irrigation using potable water from a hose bib shall be allowed.
- (3) The customer's reclaimed water irrigation system shall not be cross-connected to the potable water system.
 - (c) Petition for Variance

- (1) Any customer requesting a variance from the provisions of this Section may file a petition for variance in the form of a letter to the Director.
- (2) No variance shall be approved by the Director unless the petitioner affirmatively demonstrates that alternative measures will be implemented which achieve the same level of potable water demand reduction as the provision for which a variance is requested. Potable water demand reduction must be demonstrated within three (3) months of the date of variance approval. Extensions may be granted by the Director upon adequate justification.
- (3) Failure to achieve potable water demand reduction within three (3) months of variance approval shall result in discontinuation of irrigation water service.

Sec. 270.227. Use Of Reclaimed Water

(a) Supply

The County shall deliver to the best of its ability, an adequate supply of reclaimed water at all times; provided, however, that no guarantees can be provided to deliver specific quantities at specific times. The County reserves the right to temporarily discontinue service to the Reclaimed Water System, or a portion thereof, as deemed necessary by the Director.

(b) Conservation of Reclaimed Water

- (1) The County recognizes that reclaimed water is a valuable resource. Reclaimed water shall be used only to the extent necessary for irrigation of lawns, landscaping, individual plants, and other similar uses.
- (2) A functioning rain sensor device that interrupts the irrigation cycle when activated is required on all irrigation systems utilizing reclaimed water.
 - (c) Restrictions on Use of Reclaimed Water

The following uses or conditions shall not be permitted for reclaimed water:

- (1) entry into buildings or dwelling units;
- (2) filling swimming pools, hot tubs, spas, or wading pools, or for other body contact recreation including, but not limited to, playing in sprinklers;
- (3) pressurizing fire hydrants or sprinkler systems for fire protection;
 - (4) irrigating crops intended for human consumption;
- (5) washing pets, equipment, structures, driveways, or vehicles by residential customers;
 - (6) ponding or runoff;
- (7) release or discharge to open water bodies including, but not limited to, lakes, rivers, canals, and ditches; or

(8) application to properties containing subsurface drainage tiles or plates.

(d) Wells

- (1) Customers with existing irrigation wells may continue to use wells for irrigation purposes after reclaimed water is available; provided, however, that the customer shall ensure that all irrigation wells are physically disconnected from the potable and Reclaimed Water System.
- (2) The County shall not provide reclaimed water service where wells are used as a source of potable water and where buffer zones, as required by the Florida Department of Environmental Protection, cannot be maintained.
- (3) Wells intended for use as potable water shall not be installed within seventy-five feet (75') of existing areas where reclaimed water is available.

Sec. 270.228. Administrative Requirements

(a) Application for Reclaimed Water Service

Prior to the provision of reclaimed water by the County, an applicant shall submit, on a form provided by the Department, an application to purchase Reclaimed Water Service. The applicant shall state the area of land to be irrigated in acres. Flows shall be based on an annual calculated daily usage not to exceed one and a half inches (1½") per week.

(b) The applicant shall attend a health and safety presentation provided by the Environmental Services Department.

(c) Right to Refuse Service

No payment of costs, submittal of an application, or other act required to receive Reclaimed Water Service shall guarantee such service. The Department shall have the right, at all times, to refuse to extend service on the basis of a use detrimental to the system, inadequate supply of reclaimed water, lack of payment of required fees, or for any other reason which in the sole judgment of the Director, applying sound engineering principles, may cause the extension to not be of benefit to the County. Any fees submitted to the Department shall be returned to the applicant upon determination by the Department to not provide service.

(d) Fees

Reclaimed water service charges shall be established by Resolution as adopted from time to time by the Board of County Commissioners. The Board of County Commissioners may adopt a schedule of charges for the different customer and service classifications as established herein, and may further provide for charges for particular uses within each classification.

(e) Non-Transferability of Reclaimed Water

Any reclaimed water capacity allocated for a property shall be used only for the property for which the capacity was

allocated. The capacity allocation shall run with the land and is transferred with ownership of the property if written notification was provided to the County on the appropriate County form prior to the property transfer. Reclaimed water cannot be sold or transferred to another person or entity.

(f) Discontinuing Service

The County may discontinue Reclaimed Water Service to any customer due to non-compliance with the provisions established hereunder, nonpayment of bills, tampering with any service equipment, cross-connections with another water source, or for any reason detrimental to the utility system. The County shall terminate service until the condition is corrected and all costs due the County are paid. These costs may include, but are not limited to, delinquent billings, fines, and payment for any damage caused to the utility system. Should discontinued Reclaimed Water Service be turned on without Department authorization, the Department shall remove the service equipment and make an additional charge as provided hereunder.

Sec. 270.229 Reclaimed Water System Requirements

(a) Public Easement Requirements

(1) No reclaimed water mains shall be accepted by the County for maintenance unless located in public rights-of-way or public easements suitable for such purpose. Any new easement shall be adequately sized to accommodate the construction,

installation, and maintenance of any Reclaimed Water System component.

(2) No obstructions shall be planted, built, otherwise created within the limits of an easement or right-ofwritten permission wav without the οf the Director. Obstructions may include, but are not limited to, permanent structures, plants larger than groundcover, and all items listed as nuisance items in Sec. 95.3. Removal of obstructions, and a11 repairs necessitated by said removal, shall responsibility of the property owner as required by Sec. 95.11.

(b) Ownership and Maintenance

(1) All reclaimed water facilities and appurtenances, up to and including the reclaimed water meter, other than onsite irrigation systems, shall become and remain the property of the County. After acceptance by the County, such facilities and appurtenances shall be maintained by the County and may be removed or changed by the County at any time. The property owner shall convey to the County a perpetual easement to operate and maintain the service line and point of connection if located on privately owned property, as a precondition of receiving Reclaimed Water Service from the County. By constructing or installing facilities or appurtenances accepted by the County, no person shall acquire any interest or right therein other than the privilege of connecting to the Reclaimed Water System and

receiving services therefrom. No person shall perform any work or be reimbursed for any work on the Reclaimed Water System without written authorization by the Director prior to commencement of the work.

- (2) The County shall make a reasonable effort to inspect and maintain the facilities and appurtenances in good repair but assumes no liability for any damage caused by the system in situations beyond the control of normal maintenance or not reported to, or known by the County in sufficient time to cause repairs. These situations may include, but are not limited to, damage due to breaking of pipes and poor quality of water caused by unauthorized or illegal entry of foreign material into the system.
- (3) All irrigation systems constructed on private property, except components of the Reclaimed Water System located in utility easements, shall remain the property of and be operated and maintained by the owner. Each owner shall be responsible for maintaining the irrigation system in good working condition. The County may disconnect the service to any property that does not maintain the Reclaimed Water System or irrigation system in good working condition.
- (4) The County shall not be responsible for maintenance of or damage caused by water escaping from the

service pipe or any other pipe fixture on the outlet side of the meter.

(5) Should the property owner require reclaimed water service at different pressures, or in any way different from that normally supplied by the County, the property owner shall be responsible for installing the necessary devices to make the adjustments and for obtaining prior written approval from the Director to make the adjustments.

(c) Connection Responsibility and Cost

Cost for connecting to the County's reclaimed water system shall be established by Resolution as adopted from time to time by the Board of County Commissioners.

(d) Cross Connection and Backflow Prevention

- In all premises where Reclaimed Water Service is provided, the potable water supply shall be protected by an approved backflow prevention device. No cross connection shall be permitted. All design and construction of Reclaimed Water conform cross-connection Systems shall to and backflow prevention procedures set forth in Section 9. Backflow prevention devices shall be installed and maintained annually as specified herein.
- (2) No connection shall be permitted between the Reclaimed Water System and an irrigation well. All irrigation

wells shall be physically disconnected from the Reclaimed Water System.

- (3) To determine the presence of any potential hazards to the public potable water system, County personnel may enter upon the premises of any customer receiving reclaimed water for the purposes of conducting an inspection. Each customer of reclaimed water shall, by reclaimed water service application, give implied consent to such entry upon the premises.
- (4) In the event a cross-connection is found on property provided Reclaimed Water Service, the Director may immediately discontinue potable and Reclaimed Water Service to said property. Before service may be resumed, the customer shall remove the cross connection, perform other corrections and install any devices required by the Director.

(e) Construction and Design Standards

- (1) Existing irrigation systems may connect to reclaimed water provided no cross-connections exist and the potable water supply is protected by an approved backflow prevention device. All vaults, valves, and outlets connected to Reclaimed Water Systems shall be labeled to warn the public that the water is not safe for drinking.
- (2) Any irrigation system provided by the customer shall consist of an underground system with permanently placed

sprinkle devices or below ground hose bibs contained in a locked valve box. The systems shall not include devices, above ground faucets, or other connections that could permit the reclaimed water to be used for any purpose other than irrigation unless such uses and systems have been approved in writing by the Director.

- (3) The County shall require appropriately sized reclaimed meters for all Reclaimed Water System customers. Installation and maintenance of reclaimed meters shall comply with guidelines developed for meters established herein.
- (4) Every service line provided by the customer shall have an easily accessible and fully protected master control valve on the discharge side of the meter.
- (5) All common landscape irrigation spray heads may be used with reclaimed water; however, within one hundred feet (100') from outdoor public eating, drinking, and bathing facilities, low trajectory nozzles, or another similar device to minimize aerosol formation, shall be used.
- (6) All reclaimed water lines shall be installed in a manner such that the minimum horizontal and vertical separation between existing potable water mains and sewer mains is in accordance with Chapter 62-555, F.A.C., as amended.
- (7) For newly installed irrigation systems, all pipes and ground level or above appurtenances shall be adequately

identified by color and advisory signs. Coloration and signage standards shall be consistent with Chapter 62-610, F.A.C., as amended. All vaults, valves, and outlets on Reclaimed Water Systems shall be labeled to warn the public that the water is not safe for drinking. Signs denoting areas irrigated by reclaimed water shall be posted in a conspicuous manner so as to notify people accessing the area of the use of reclaimed water for irrigation purposes. Signs shall be provided and installed at locations determined by the County. Pantone Purple .522C color coding and markings shall be used to differentiate reclaimed water lines from potable water lines and sewer collection lines.

(f) Unauthorized Work on Reclaimed Water System

No person, unless expressly authorized by the Director, shall tamper with, work on, or in any way alter or damage any County reclaimed water appurtenance. Tampering or working on shall include, but is not limited to, opening or closing valves, or causing any water to flow from the system. No unauthorized person shall cut into or make any connection with the system.

(g) Inspections

(1) To ensure compliance with provisions of Section 9, the County may inspect, remove, and/or secure any or all devices installed by the customer which connect to or control the Reclaimed Water System.

- (2) Inspections shall occur annually in accordance with the requirements set forth in Chapter 62.610, F.A.C. The Department may perform additional inspections at reasonable times with such frequency as is necessary to establish compliance with Section 9.
- (3) Failure to permit authorized County personnel to enter onto the premises for the purpose of inspecting the customer's Reclaimed Water System pursuant to this Section shall be grounds for immediate discontinuance of the Reclaimed Water Service by the County to the subject premises.

(h) Chemical Injections

No person shall inject any chemical into a Reclaimed Water System.

Section 5. Codification. It is the intention of the Board of County Commissioners that the provisions of this Ordinance shall become and be made a part of the Seminole County Code and the Land Development Code of Seminole County. It is the further intention of the Board of County Commissioners that the word "Ordinance" may be changed to "Section," "Article," or other appropriate word or phase and that the sections of this Ordinance may be renumbered or relettered to accomplish such intention; provided, however, that Sections 5, 6 and 7 shall not be codified.

Section 6. Severability. If any provision of this Ordinance or the application thereof to any person or circumstance is held

invalid, it is the intent of the Board of County Commissioners that the invalidity shall not affect other provisions or applications of this Ordinance which can be given effect without the invalid provision or application, and to this end the provisions of this Ordinance are declared severable.

Section 7. Effective Date. This Ordinance shall take effect upon filing a copy of this Ordinance with the Department of State by the Clerk of the Board of County Commissioners.

ENACTED this ___14 day of __March__, 2006

BOARD OF COUNTY COMMISEMINOLE COUNTY FLOR

By: Carling

CARLTON HENLEY

AN ORDINANCE AMENDING PART 5, CHAPTER 270, SEMINOLE COUNTY CODE, "EMERGENCY WATER CONSERVATION"; PROVIDING A TITLE; PROVIDING THE INTENT AND PURPOSE; PROVIDING AUTHORITY; PROVIDING DEFINITIONS; PROVIDING A LANDSCAPE IRRIGATION SCHEDULE; PROVIDING FOR EXCEPTIONS FROM LANDSCAPE IRRIGATION SCHEDULE; PROVIDING FOR VARIANCES FROM LANDSCAPE IRRIGATION SCHEDULE; PROVIDING FOR ENFORCEMENT; PROVIDING FOR REPEAL; PROVIDING FOR CODIFICATION; PROVIDING FOR SEVERABILITY AND PROVIDING AN EFFECTIVE DATE.

WHEREAS, the St. Johns River Water Management District (District) has responsibility and exclusive authority, pursuant to Chapter 373, Florida Statutes, for regulating the consumptive uses of water; and

WHEREAS, the District amended Rule 40C-2.042, Florida Administrative Code (F.A.C.), the General Consumptive Use Permit by Rule governing the regulation of small irrigation uses below consumptive use permit thresholds in Rule 40C-2.041(1), F.A.C.; and

whereas, Rule 40C-2.042(2)(a), F.A.C., grants a general permit to each person located with the District to use, withdraw, or divert water for such small landscape irrigation uses, provided the irrigation does not occur more than two (2) days per week and does not occur between the hours of 10:00 a.m. and 4:00 p.m. daily, subject to certain exceptions as set forth hereinbelow; and

WHEREAS, Rule 40C-2.042, F.A.C., applies to landscape irrigation regardless of whether the water derives from ground or surface, private well or pump or private or public utility; and

WHEREAS, Rule 40C-2.042, F.A.C., provides that a local government may adopt an ordinance identifying the specific two (2) days of the week when irrigation shall be allowed; and

WHEREAS, the Board of County Commissioners (Board) of Seminole County desires to adopt an ordinance in accordance with Rule 40C-2.042(2)(a)and(b), F.A.C., and the Board finds and declares that said adoption is appropriate and in the public interest of the citizens of the community; and

WHEREAS, Board has evaluated the provisions of the County's regulations relative to a water conservation program, including implementation, water uses, enforcement, exceptions and penalty requirements, and has concluded that certain provisions of the County's Code should be amended to address the Board's concerns pertaining to effective water conservation methods; and

WHEREAS, County compliance with permits issued by and policies of the St. Johns River Water Management District along with demands caused by a growing population have created the need for additional water conservation measures; and

WHEREAS, significant public involvement continues through educational outreach programs informing citizens of the proposed changes to the County Code as set forth in this Ordinance; and

WHEREAS, the provisions of this Ordinance are consistent with the provisions of the Seminole County Comprehensive Plan; and

WHEREAS, the Seminole County Home Rule Charter requires that an Economic Impact Statement be prepared to address the potential impacts and economic costs of this Ordinance upon the public and taxpayers of Seminole County and such Economic Impact Statement has been prepared and made available for such public review and copying prior to the

enactment of this Ordinance in accordance with provisions of the Seminole County Home Rule Charter,

BE IT ORDAINED BY THE BOARD OF NOW THEREFORE, COUNTY COMMISSIONERS OF SEMINOLE COUNTY, FLORIDA:

Section 1. Secs. 270.251 through 270.258, Part 5, Chapter 270, Seminole County Code, are hereby substantially reworded to read as follows:

Part 5. WATER CONSERVATION ORDINANCE

Sec. 270.251. Short title.

This Part shall be known and referred to as the "Water Conservation Ordinance."

Sec. 270.252. Intent and Purpose

It is the intent and purpose of this Ordinance to implement procedures that promote water conservation through the more efficient use of landscape irrigation.

Sec. 270.253. Authority.

The County is authorized by its Home Rule Charter, the Florida Constitution and the provisions of Chapters 125 and 373, Florida Statutes, to establish and administer programs for water conservation.

Sec. 270.254. Definitions.

For the purpose of this Part, the following terms, phrases, words and their derivatives shall have the meaning given herein. When not inconsistent with the context, words used in the present tense include the future, words in the plural include the singular, and words in the singular include the plural.

- (a) "Address" means the house number of a physical location of a specific property. This includes "rural route" numbers but excludes post office box numbers. If a lot number in a mobile home park or similar community is used by the United States Postal Service to determine a delivery location, the lot number shall be the property's address. An "even numbered address" means an address ending in the numbers 0, 2, 4, 6, 8, or the letters A M. An "odd numbered address" means an address ending in the numbers 1, 3, 5, 7, 9, or the letters N Z.
- (b) "District" means the St. Johns River Water Management District.
- (c) "Person" means any person, firm, partnership, association, corporation, company, or organization of any kind.
- (d) "Landscape irrigation" means the outside watering of plants in a landscape such as shrubbery, trees, lawns, grass, ground covers, plants, vines, gardens and other such flora that are situated in such diverse locations as residential areas, cemeteries, public, commercial, and industrial establishments, and public medians and rights of way. "Landscape irrigation" does not include golf course greens, tees, fairways, primary

roughs, and vegetation associated with intensive recreational areas such as, but not limited to, playgrounds, and football, baseball and soccer fields.

Sec. 270.255. Landscape irrigation schedule.

- (a) Landscape irrigation at even numbered addresses or no address must only occur on Thursday and Sunday and must not occur between 10:00 a.m. and 4:00 p.m. daily.
- (b) Landscape irrigation at odd numbered addresses must only occur on Wednesday and Saturday and must not occur between 10:00 a.m. and 4:00 p.m. daily.
- (c) Landscape irrigation at commercial addresses must only occur on Tuesday and Friday and must not occur between 10:00 a.m. and 4:00 p.m. daily.
- (d) Any person who purchased and installed an automatic lawn sprinkler system after May 1, 1991, shall install, maintain and operate a rain sensor device or switch to override the irrigation cycle of the sprinkler system when adequate rainfall occurs per Section 373.62, Florida Statutes.

Sec. 270.256. Exceptions.

Landscape irrigation shall be subject to the following irrigation schedule exceptions:

- (a) Irrigation using a micro-irrigation system is allowed at any time.
- (b) Irrigation of new landscape is allowed at any time of day on any day for the initial thirty (30) days and

- every other day for the next thirty (30) days for a total of one (1) sixty day (60) period, provided that the irrigation is limited to the minimum amount necessary for such landscape establishment.
- Watering in of chemicals, including insecticides, (c) pesticides, fertilizers, fungicides and herbicides when required by law, the manufacturer, or best management practices is allowed at any time within twenty-four (24) hours of application.
- (d) Irrigation systems may be operated at any time for maintenance and repair purposes not to exceed ten (10) minutes per hour per zone.
- (e) Irrigation using a hand-held hose equipped with an automatic shut-off nozzle is allowed at any time.
- (f) Discharge of water from а water-to-air conditioning unit or other water-dependent cooling system is not limited.
- The use of water from a residential reclaimed water (g) system shall follow the irrigation schedule described in Sec. 270.255. For purposes of this subsection, a reclaimed water system includes systems in which the primary source is reclaimed water, which may or may not be supplemented from another source during peak demand periods.

Sec. 270.257. Variances from landscape irrigation schedule.

A variance from the landscape irrigation schedules set forth in Sec. 270.255 may be granted by the Department Director or designee if strict application of the landscape irrigation schedule would lead to unreasonable or unfair results in particular instances, provided that the applicant demonstrates with particularity that compliance with the schedule will result in a substantial economic, health, or other hardship for the applicant requesting the variance or those served by the applicant. Where a contiguous property is divided into different zones, a variance may be granted hereunder so that each zone may be irrigated on different days than other zones of the property. However, no single zone may be irrigated more than two (2) days a week.

Sec. 270.258. Enforcement.

- (a) The Department Director and all employees of the Department shall have the duty and authority to enforce the provisions of this Part and the power to issue written warning notices, and bring complaints to the State Attorney's Office for prosecution.
- (b) A violations of this Part shall be classified as a Class I violation as provided in Sec. 53.31(a).

Section 2. Sec. 270.259, Part 5, Seminole County Code, is hereby created to read as follows:

Sec. 270.259. Repeal.

All ordinances or parts of ordinances insofar as they are inconsistent or in conflict with the provisions of this Part are repealed to the extent of any conflict.

Section 3. Secs. 270.260 through 270.270, Part 5, Seminole County Code, are hereby reserved.

Section 4. Codification. It is the intention of the Board that the provisions of this Ordinance shall become and be made a part of the Seminole County Code, and that the word "ordinance" may be changed to "section", "article", or other appropriate word or phrase and the sections of this Ordinance may be renumbered or relettered to accomplish such intention; providing, however, that Sections 4, 5 and 6 shall not be codified.

Section 5. Severability. If any provision of this Ordinance or the application thereof to any person or circumstance is held invalid, it is the intent of the Board that the invalidity shall not affect other provisions or applications of this Ordinance which can be given effect without the invalid provision or application, and to this end the provisions of this Ordinance are declared severable.

Section 6. Effective date. This Ordinance shall take effect upon filing a copy of this Ordinance with the Department of State by the Clerk of the Board of County Commissioners.

ENACTED this 15th day of June, 2007.

ATTEST:

MARYANME MORSE

Clerk to the Board of

County Commissioners of

Seminole County Florida.

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BOARD OF COUNTY COMMISSIONERS SEMINOLE COUNTY, FLORIDA

CARLTON HENLEY, Chairm